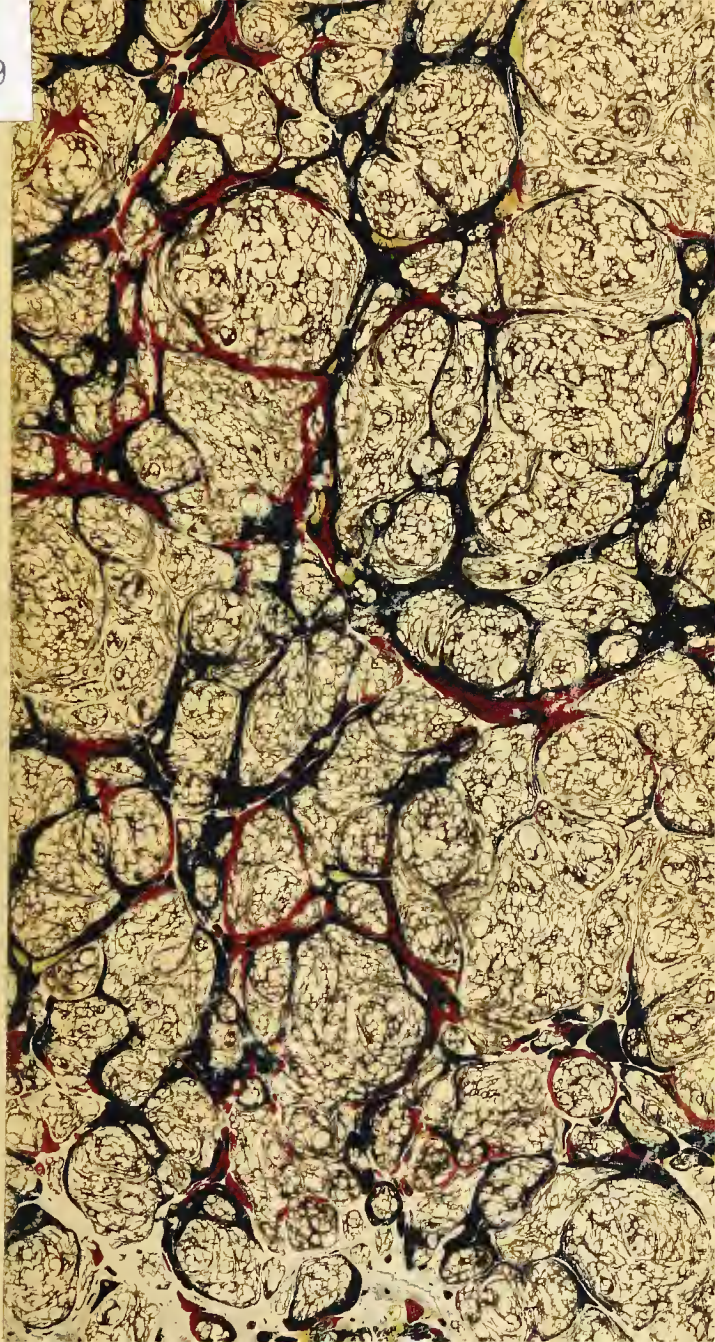


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GOOD ROADS

AN OUTLINE OF STATE ROAD SYSTEMS

Compiled by
SVEINBJORN JOHNSON
Legislative Reference
Librarian

North Dakota Public Library Commission
Legislative Reference Department

Bulletin No. 2

BISMARCK
1910

BISMARCK:
TRIBUNE, PRINTERS AND BINDERS,
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B I S M A R C K
1910

BISMARCK:
TRIBUNE, PRINTERS AND BINDERS,
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V.

One of the most absorbing questions before the people of this state is that of good roads. Demands for legislation on this subject have come from every quarter and the platforms of the parties have taken the matter up. It is believed that the following brief summaries and outlines of the systems of other states will enable legislators and the public interested in the question to see at a glance what has been accomplished and what plan or combination of plans, is best suited to conditions in this state.

This is the second of the series of bulletins dealing with state problems issued by the Legislative Reference Department, the first having dealt with State Tax Commissions.

SVEINBJORN JOHNSON,
Legislative Reference Librarian.

TABLE OF CONTENTS.

	Page
Introductory	7
Part I—Good Roads States	11
California	11
Colorado	13
Connecticut	15
Delaware	17
Idaho	19
Illinois	21
Maine	23
Maryland	26
Massachusetts	28
Michigan	30
Minnesota	34
New Hampshire	37
New Jersey	39
New Mexico	41
New York	43
Ohio	47
Pennsylvania	50
Rhode Island	53
Vermont	54
Virginia	56
Washington	59
West Virginia	63
Part II.—Road Systems in other States	66
Alabama	66
Arizona	66
Arkansas	67
Florida	68
Georgia	69
Indiana	70
Iowa	71
Kansas	72
Kentucky	73

	Page
Louisiana	74
Montana	75
Mississippi	76
Missouri	77
Nebraska	78
Nevada	79
North Carolina	79
North Dakota	80
Oklahoma	81
Oregon	82
South Carolina	83
South Dakota	84
Tennessee	84
Texas	85
Utah	86
Wisconsin	87
Wyoming	88
Appendix	89
State Highway Departments	89
Organization and constitution	89
Powers and duties	89
Qualifications of members	90
Salaries	92
Number of commissioners	91
Expenditures by states for good roads	96
Cost of roads per mile	94-95
State appropriation	91
State tax levies	91
Assessed valuations of states	92
State aid	91
Paid by state	91
Paid by county	91
Paid by township	91
Paid by abutter	91
Statute labor	91
Local bonds	93

INTRODUCTORY.

It is only within recent years that the bad condition of the wagon roads of this country began to receive anything more than passing attention. While the foreign tourist admitted that our railroad service was the best, he branded our public highways as the worst in the world. Then came the bicycle and the automobile and the operators of these added their voices to the constantly swelling chorus of complaints against our public roads. The result was that individuals, associations, localities and finally states took the matter of highway improvement seriously in hand.

THE STATE HIGHWAY DEPARTMENT.

The eastern states, where the first real progress in the direction of road improvement was made, sought to profit by the experience of the Old World in the field of highway construction. Experience had conclusively shown that the work of permanent highway improvement called for technical skill and funds altogether beyond the resources of the average community. Moreover, if permanent road building were left to local enterprise, there would result a lack of uniformity of plan and execution fatal to the most desirable and lasting results. To meet these difficulties one state after another created state highway departments and provided for the services of skilled engineers in connection therewith. This department assisted the local road authorities, prepared plans and specifications for highway improvement, aided in the selection of highways to be improved, superintended the expenditure of state aid money and gave advice and instructions to overseers generally.

One of the most important matters in this connection is the constitution of the highway department. By reference to the summaries it will be seen that there are at least four types of organization in control of the department. It is sufficient to point out in this place that the plan that has won the approval of the United States Office of Public Roads is that whereby the highway commission is composed of the profes-

sors of civil engineering in different state colleges as ex officio members. The board continues in existence regardless of the mutations of politics or rotation in office. It seems to be the opinion of the Office that this form of commission will be free from every form of political influence and can therefore attain the highest efficiency.

STATE AID.

The next step in the progress of highway improvement was the granting of state aid. The locality could not bear the financial burden or furnish the technical skill. Moreover, the condition of the public highways came to be regarded not merely of local interest but of importance to the state as a whole and on this theory the states granting state aid proceeded to distribute thousands of dollars among the counties and towns.

STATE SUPERVISION.

With the granting of state aid came increased state supervision. No state appropriates money for road improvement without supervising directly the work when completed and furnishing from the state office the plans and specifications. In a few instances the plans are prepared by the local authorities, but in all cases are subject to examination by the highway department.

LOCAL SUPERVISION.

In further recognition of the need of expert supervision of road building, the most advanced states have uniformly provided for a county, district or local official, by training and experience qualified to direct highway improvement. He may be variously termed county engineer, superintendent, inspector or commissioner of highways, but everywhere he must possess qualifications that peculiarly fit him for the duties of supervising the improvement of wagon roads. This idea is not alone confined to states that grant financial aid to the localities. That skilled supervision is a condition precedent to the highest efficiency has been recognized in many of the non state

aid commonwealths by providing for the election or appointing of county engineers, expert in the arts of civil engineering.

LOCAL BONDS.

Under the present law it seems that counties in this state cannot issue bonds for highway improvement, except for bridges. This is contrary to what appears to be the general practice. The majority of the states give the counties or the townships the power to issue bonds, under proper safeguards, for highway construction. Where state aid is granted funds thus provided very conveniently supplement the contribution from the state. In general, it may be said that the raising of money for permanent road improvement by the ordinary process of taxation, without imposing heavy burdens upon the taxpayer, is so slow as to be impractical. A perusal of the summaries following reveals the fact that no state has accomplished extensive permanent improvement of its highways that has not given the localities the power to issue bonds for this purpose. The reasons underlying the proposition are so plainly elementary as to require no further elaboration.

STATUTE LABOR.

Another noticeable aspect of this movement for better roads is the gradual disappearance of statute labor. The states whose progress is generally conceded to be the most pronounced, almost without exception provide that all road taxes be paid in money without the privilege of commutation in labor. That this relic of the past is difficult to sweep away and yet is regarded a lion in the pathway of the van of progress in highway improvement is somewhat uniquely recognized by Pennsylvania. This state offers a tempting money reward to townships that abolish statute labor on their roads.

CONSTITUTIONAL OBSTACLES.

There has been some agitation for state aid in highway construction in North Dakota. Section 185 of the constitution provides that the state shall not engage in any work of in-

ternal improvement unless authorized by a two-thirds vote of the people. Elsewhere, notably in Michigan, Minnesota and Wisconsin, it has been held necessary to amend similar constitutional provisions before the state could appropriate money in aid of highway improvements.

PART I.

GOOD ROADS STATES

CALIFORNIA.

The State Highway Department. Laws of 1907, chapter 185. The department of engineering consist of the governor, the state engineer as chief executive officer of the department, the chief superintendent of state hospitals and the chairman of the board of harbor commissioners of San Francisco.

The governor, by and with the advice and consent of the senate, appoints the state engineer for a term of four years. He has charge of the engineering and structural work of the department. His annual salary is four thousand eight hundred dollars.

Powers and duties. The department of engineering has full control of all roads that have been declared state highways and all highway expenditures made by the state are in its charge. It may obtain rights of way for roads, by purchase or condemnation, and it may appoint superintendents of state highways. The department examines existing highway conditions and puts at the service of the state the most approved methods of highway construction. It supplies, without charge, information to road authorities when requested to do so, and collects data relating to the location of suitable road material, publishing the same in the forms of bulletins, maps or diagrams. It prepares forms of account books for highway officials and general forms for the surveying of state highways. To aid in the performance of its duties the department may call upon local officials for information.

State Aid. California makes no provision for state aid, but the state has built roads through the mountainous and isolated or sparsely settled districts where the people of the counties are unable to meet the expenses of construction. The state has built almost two hundred and thirty-seven miles of roads in

this manner, but none of these are metalled or macadamized. The legislature of 1909 passed an act placing before the people at the general election in 1910 a proposition to vote bonds for eighteen million dollars for a state road plan.

Local Supervision. Laws of 1907, chapter 442. The control over highways is vested in the supervisors of the county. They may form road districts for the purpose of permanently improving its highways and may issue bonds and levy special taxes to pay the expenses of such work.

Before the district is formed, the board of supervisors pass a resolution of intention specifying the work to be done and giving interested parties an opportunity to be heard in protest.

The supervisors have the power to appoint a competent person to act as engineer of the work and who must furnish the civil engineering services and do the necessary surveying. The board may also appoint a superintendent of the work, but the same person may hold both positions.

Road Revenues. Statutes 1907, p. 795. A special tax is levied upon all lands within the improvement district sufficient to pay the principal of the indebtedness when it falls due, with the interest thereon.

The county board of supervisors must transfer to each improvement district from the general road funds of the county an amount which, in the judgment of the board, is a fair proportion of the road fund of the supervisorial district in which the improvement district is situated.

County bonds. County supervisors may form road improvement districts¹ and issue bonds for the construction of permanent roads therein, unless a majority of the property owners residing within such district object. The bonds must be paid within twenty years and the rate of interest on the same must not exceed seven per cent.

Taxes. Code 1906, section 2652. Every male person between the ages of twenty-one and fifty years is required to pay an annual road poll tax of three dollars, unless exempt by law.

¹Improvement districts are outside of incorporated towns.

Section 2653. The county board of supervisors may levy a property tax for highway purpose of not to exceed forty cents upon each one hundred dollars of assessable property in any one year.¹

Statute labor. All highway taxes are paid in cash.

COLORADO.

The State Highway Department. Laws of 1909, chapter 57. The state highway commission consists of three members appointed by the governor for a term of six years, the eastern, central and western sections of the state each having a representative on the commission. The chairman receives an annual salary of one thousand two hundred dollars, and each of the other two six hundred dollars, together with their necessary traveling expenses while away from their homes and performing the duties of their office.

The commission employs a secretary, who must be a civil engineer, at an annual salary of two thousand five hundred dollars. The attorney general is ex-officio attorney for the commission.

Powers and duties. The commission apportions the state aid fund among the counties and notifies the county commissioner of the amounts to which the counties are entitled. It must prepare a map showing especially the location of all proposed roads that will receive state aid as well as that of all public roads.

The commission ascertains the location of road material available throughout the state and prepares rules and regulations for the construction, improvement and maintenance of state roads. While the boards of county commissioners make the necessary surveys, plans, specifications and estimates of cost of work upon state roads within the county in accordance with the rules and regulations of the commission, the commission may make changes therein and may order other plans, specifications, surveys and estimates to be made if deemed necessary.

The construction, improvement and maintenance of state roads

¹The county road taxes are apportioned to the road districts.

is under the direction of the local boards of county commissioners, but subject to the supervision of the state highway commission. All contracts for work upon state roads are let by the county commissioners, but they must first be approved by the commission. The county commissioners are required to make careful annual reports to the highway commission showing all items expended on state roads under this act and all other items expended by the county for other roads therein.

State Aid. Laws of 1909, chapter 57. The county commissioners of each county prepare a map showing the roads by them deemed of sufficient importance to be improved under this act. A copy of this map is filed with the state highway commission, together with a statement as to the location of suitable road material within the county. A duplicate of the road map is also filed with the county clerk.

On or before January first, nineteen twelve, the highway commission must have a road map of the state showing all open public roads in each county and in color all roads deemed by the commission of sufficient public importance to receive aid hereunder. The commission divides such roads into two classes, primary and secondary, those of the former being improved first. In March of each year the state fund is apportioned among the counties; each county must raise double the amount apportioned to it by the commission.

Appropriation. For the purpose of state aid in the construction and improvement of highways, the sum of fifty thousand dollars is appropriated.

Local Supervision. The board of county commissioners has control of the roads of the county. It may divide the county into suitable road districts from time to time. The amount to be expended in such district must not be less than fifty per cent. of the taxes collected therein for road purposes.

The board appoints annually a road overseer for each district, who receives three dollars per day for his services.

Taxes. The board may levy a maximum property tax of one dollar for every one hundred dollars of valuation for road purposes.

Road Revenues. Code 1896, section 3935. County tax. The

board of county commissioners may levy a property tax for road purposes not exceeding one dollar on each one hundred dollars of assessed valuation.

County bonds. The county commissioners may create an indebtedness for the building of roads and bridges when authorized by a majority of the voters of the county.

Debt limit. The aggregate amount of indebtedness of any county, exclusive of debts contracted prior to 1876, is limited as follows:

Counties in which the assessed valuation of property exceeds five million dollars, six dollars on each one thousand dollars thereof; counties in which the assessed valuation of property is less than five million and exceeds one million dollars, twelve dollars on each one thousand dollars thereof.

Poll tax. Laws 1907, chapter 215, section 11. Every able-bodied man between the ages of twenty-one and fifty years is required annually to pay a road poll tax within his road district of three dollars, or in lieu thereof perform two days' labor on the highways.

State labor. All property taxes are paid in cash.

Convict Labor. Laws 1907, chapter 206. The state prison authorities are authorized to work the convicts on state roads.

CONNECTICUT.

The State Highway Department. Acts of 1905, chapter 232. The governor appoints quadrennially a highway commissioner, who must be an experienced road builder and who receives an annual salary of five thousand dollars and his actual and necessary traveling expenses, not exceeding one thousand five hundred dollars in any one year. (Amended chapter 93, Acts of 1909.)

The commissioner must appoint one deputy highway commissioner and eight division engineers and such other assistants as may be necessary to make surveys, plans, specifications and maps. Salaries of the assistants are determined by the commissioner, but may not, in the aggregate, exceed sixty-five thousand dollars annually. The commissioner divides the state

into eight highway districts and one division engineer or inspector is assigned to each district.

Powers and duties. Whenever a town has declared its intention to build a public road within its limits, the highway commissioner designates the highway to be so constructed or improved. He also makes surveys and prepares plans, specifications and estimates of cost. If the cost does not exceed one thousand dollars he may permit the town to do the work without competition. He may reject any or all bids, and a copy of the contract to do the work is filed with the commissioner. (Chapter 264, Acts of 1907.)

The commissioner keeps in repair roads built by state aid, but charges one-fourth of the cost of such work to the town. If any road built under a statute enacted prior to 1907 has not been properly repaired, the commissioner may enter the town, do the work and charge the cost thereof to the town. (Chapter 135, Acts of 1909.)

State Aid. Acts of 1905, chapter 232. Whenever a town by its vote declares its intention to build a public road, the highway commissioner designates the highway to be constructed or improved. If the selectmen refuse to carry out the vote of the town, the state highway commissioner performs their functions in the matter of carrying out the town vote to improve a highway.

Amount granted. The amount of state aid granted the towns is based upon the local grand lists. In towns having a grand list of over one million two hundred and fifty thousand dollars, the state pays three-fourths, and in towns having a grand list of one million two hundred and fifty thousand dollars or less, the state pays seven-eighths of the cost. (Acts of 1907, chapter 264.).

Maintenance. Highways constructed under the provisions of this chapter, or of statutes under which state aid is granted, are maintained by the highway commissioner. The commissioner files with the town within which the road lies a statement of the cost of repair and the town reimburses the state one-fourth of the total cost thereof.

Appropriation. The state aid fund is provided by an annual

appropriation of seven hundred and fifty thousand dollars.

Local Supervision. Ordinarily, road work in this state is done by the counties.

The towns at their annual meetings provide for the repair of their highways, or, if they fail to do so, the selectmen do the work.

If the towns neglect to repair their highways, and it appears to the county commissioners after hearing that the repairs are necessary, the latter order the selectmen to do the work, and if they neglect or refuse, the repairs are made by the county commissioners and the cost of the work collected from the town.

Road Revenues. Code 1902, section 1931. Town bonds. When any town has incurred or shall incur debts exceeding ten thousand dollars, it may issue bonds. The rate of interest on such bonds may not exceed six per cent. There is no provision stating that such indebtedness may or may not be incurred for highway purposes.

Road taxes. Section 2025. Any town may include in its town tax for town purposes a sum sufficient to build and repair highways.

Statute labor. All property taxes are paid in cash.

DELAWARE.

The State Highway Department. Chapter 139, Laws of 1905. There are three counties in Delaware, and the governor, under the provisions of this chapter, appoints one state highway commissioner, subject to confirmation by the senate, quadrennially, and at an annual salary of one thousand dollars, for New Castle county.

Powers and duties. The commissioner reports biennially to the legislature. A resolution passed by the Levy Court to improve a highway must be approved by the commissioner before state aid money is paid. The commissioner also has charge of the work after the contract has been awarded, and he appoints a supervisor of construction at three dollars per day, to be paid by the levy court.

The commissioner investigates the most practical methods

of maintaining and constructing roads, estimates the cost thereof and prepares plans and specifications.

He certifies to the state treasurer and to the Levy Court of New Castle county the amounts expended under this act, and he draws his warrants upon the state treasurer for one-half of the cost of construction thereof. He also certifies to New Castle county its share of such cost.

State Aid. A resolution to improve a highway is passed by the levy court, but it must be approved by the highway commissioner before the state aid money is paid.

Section 9. The highway commissioner takes charge of the work after the contract has been awarded and filed and he appoints a supervisor of construction, who receives three dollars per day, to be paid by the levy court.

Section 11. The Levy Court ascertains one-half of the estimated cost of all work for which contracts have been let and includes such amount in the annual tax levy for the county. The other half is paid by the state. The present annual appropriation is thirty thousand dollars.

Maintenance. Roads constructed under this act are forever county roads and the same must be kept in repair by the Levy Court of New Castle county.

Local Supervision. The Levy Court of New Castle county appoints a county engineer at a salary of two thousand five hundred dollars per annum.¹ He annually directs the repairs or improvements upon public roads in the county, subject to the approval of the Levy Court. The chapter also provides for the appointment, by the Levy Court, after the beginning of the year 1911, of a road supervisor for each of the hundreds of the county. He has charge of the work upon roads under the direction of the county engineers.

Road Revenues. Chapters 143 and 144, Laws of 1905, provide that the counties of Kent and Sussex may levy a special tax, in addition to the regular levy, not exceeding a certain

¹Laws 1906-7, chapter 146, section 3. The county engineer may also hold the office of highway commissioner, but if one person fills both of said offices the salary paid him by the levy court shall be one thousand five hundred dollars per annum.

sum which, together with a like sum appropriated by the state, must be devoted to the improvement of public roads.

Statue labor. Laws of 1906-7, chapter 156, section 13. All road taxes levied in New Castle county must be paid in cash.

IDAHO.

The State Highway Department. Code 1907, sections 1061 and 1063. The governor, state engineer and state mining inspector constitute a board of highway commissioners. The governor is the ex-officio chairman of the commission, and the commission, at its first meeting, elects one of its own members as secretary. The members of the commission serve without compensation as such members, but are allowed their actual and necessary expenses incurred in performing their official duties as such commissioners.

Powers and duties of commission. Sections 1062, 1064, 1066-1068. The state highway commission has control and supervision of such highways as have been constructed in whole or in part at the expense of the state. The commission must make an itemized report and statement on the first days of June and January of each year to the state auditor of all their disbursements, contracts and transactions.

Whenever any road subject to the jurisdiction of the commission is reported in need of repair, the commission must cause the same to be inspected by some competent person. Upon receipt of the report of such inspector the commission must notify the county commissioners of the county where the repairs are needed. The county commissioners then cause the road to be repaired within thirty days. If the county commissioners fail to make such repairs, the state highway commission may establish such road as a toll road, said road to be let out on contract for a period not exceeding five years.

Local Supervision. Code of 1907, section 1917. The public roads of the counties are under the control, supervision and management of the county commissioners of the respective counties.

Section 882. The board of county commissioners divide the county into a suitable number of road districts and must cause

to be laid out, constructed and maintained such roads as are necessary for public convenience.

When the amount of work to be done on any public road or bridge exceeds one hundred dollars, the work is let out on contract. At least twenty-five per cent. of the fund collected in any road district must be expended within that district.

Road overseers are elected by the electors of each road district. Road overseers are under the direction and supervision of the county commissioners.

Good Roads Districts. Sections 1094-52. Any portion of a county containing twenty-five or more resident taxpayers may be organized into a special road district. Upon receiving a petition for such organization, and after finding said proposed good roads district conducive to the public welfare, the county commissioners call a district election, and if a majority of the legal voters of such a district vote for such an organization, said good roads district is erected.

Good roads commissioners. Section 1052. Three resident good roads commissioners are elected at said special election. They receive two dollars and fifty cents per day. They supervise the road work within their district.

Road Revenues. Code 1907, section 900. The annual property tax for road purposes is levied by the county commissioners and must not be less than ten nor more than sixty cents on each one hundred dollars of taxable property.

Section 901. The county commissioners may levy a special road tax, not exceeding ten mills on the dollar, on all taxable property for road purposes. Said road tax may be payable either in money or in labor.¹

District bonds. Section 1054. With the consent of two-thirds of the qualified electors of their respective districts, the board of good roads commissioners have authority to issue bonds, not exceeding twenty-five per cent. of the assessed value of the real property within their district.

Statute labor. Section 894. Every male inhabitant of a road

¹The nature of the road district determines whether tax may be paid in labor or cash. Property in cities and municipalities is not subject to special tax.

district between the ages of twenty-one and fifty must perform two days' labor annually on the road. This tax may be commuted by the payment of four dollars or such smaller amounts as the county commissioners may determine.

In contract road districts all road taxes must be paid in cash.

Convict Labor. The county commissioners may require persons confined in the county jail under judgment rendered in a criminal action or proceeding to perform labor on the public works or ways in the county.

ILLINOIS.

The State Highway Department. Laws of 1905. The governor appoints, with the advice and consent of the senate, three persons, who constitute the state highway commission. Two members must belong to the political party casting the highest number of votes at last preceding election and one to the party next highest number. Each member holds office for two years and receives no compensation, except for actual and necessary expenses connected with his office. The governor designates the chairman of the commission.

The commission appoints a state engineer, who receives an annual salary of one thousand eight hundred dollars. The commission may employ other necessary assistants.

Powers and duties. The commission investigates and carries on experimental work in road building, inquires into different methods of construction, kinds of material, systems of drainage and other methods of construction as are best adapted to the various sections and soils of the state. The commission estimates the cost of the same and recommends standards of construction.

The commission prepares blanks for reports which commissioners of highways throughout the counties of the state are required to make to it concerning their work.

State Aid. The aid in road construction given by the state of Illinois is in the form of stone crushed at the penitentiaries and reformatory institutions, and road machinery. The commissioners of highways in townships may apply to the state highway commission for this aid. The local authorities must

pledge themselves to use the material and the machinery in accordance with the rules formulated by the highway commission. The road material is furnished free, except for the cost of transportation. The railroads of the state have given reduced rates on crushed rock, and in many cases have accepted the same in payment of the transportation charges.

Appropriation. Twenty-five thousand dollars is annually appropriated to carry out the purposes of this act.

Local Supervision. In counties under township organization there is annually elected by the town meeting one commissioner of highways for the township, who holds office for three years. These commissioners have charge of the roads and bridges of their respective towns and keep the same in repair and improve them so far as practicable.

In counties not under township organization the county board divides the county into road districts and in each district three commissioners of highways are elected. They have charge of the road work of the district, but they may appoint a general superintendent to work and to execute their orders. There are no boards of county commissioners in counties under township organization.

Annotated Statutes 1896. Counties under township organization have two systems for maintaining and building roads—the cash system and labor system.

Road Revenues. Chapter 121. Par. 13. Cash system. In townships under the cash system the commissioners of highways levy a tax annually for highway purposes of not to exceed sixty cents on each one hundred dollars worth of taxable property.

Chapter 121. Par. 83. Labor system. In townships under the labor system a tax of not to exceed forty cents on each one hundred dollars worth of taxable property may be levied for making and repairing roads. The tax on property lying within an incorporated city or village is turned over to the treasurer of such city or village to be expended on its roads or streets and bridges.

Township bonds. Any township that has voted a special tax in the manner provided by law may vote upon the question of

borrowing money by issuing bonds, such bonded indebtedness not to exceed the amount of thirty-five thousand dollars, the funds to be used for the construction of hard roads.

Par. 85. Jones and Addington's Supplement 1902. County road tax. The county board in counties not under township organization annually levy a road tax not exceeding fifty cents on each one hundred dollars worth of taxable property for road and bridge purposes.

Statute labor. About one-half of the townships of Illinois are still working under the labor system and permit the working out of the road taxes, wholly or in part.

Convict Labor. Acts of 1905, p. 344. The board of Prison Industries of the state is authorized and it is its duty upon requisition of the state highway commission to employ convicts and prisoners in the penal or reformatory institutions of the state in the manufacture of tile and culvert suitable for draining the wagon roads of the state and in the preparation of road building and ballasting material, and in the manufacture of road machinery, tools and necessary appliances for the building and repairing of wagon roads.

MAINE.

The State Highway Department. Chapter 112. Laws of 1907 as amended by chapter 69, Laws of 1909. The governor appoints, with the advice and consent of the council, one commissioner of highways, who must be a civil engineer. He holds office for four years and receives an annual salary of two thousand five hundred dollars.

The commissioner may, if necessary, appoint one assistant commissioner of highways at a salary of one thousand five hundred dollars per year. The appointment must be approved by the governor and council.

Powers and duties. No work on any state road is commenced until the state commissioner has approved the same and issues the specifications by which the work is to be done, and no state aid is paid until the work undertaken has been performed to his satisfaction. All bids for work are referred to the highway

commissioner for his approval. The commissioner may, if necessary, appoint inspectors to supervise the construction of all roads built by contract.

When a road is reported as completed, the commissioner inspects it and then notifies the auditor as to the amount of state aid due thereon. The commissioner determines the location of highways built by state funds, after all state aid has been paid as applied for, but his decision is subject to the approval of the governor and council.

The highway commissioner compiles statistics relating to public highways and by means of maps, lectures, prints and bulletins disseminates information relating to the most approved methods of road building. He annually conducts, under the auspices of the county commissioners, meetings in each county to discuss the problem of road building.

The county commissioners designate the state roads, but if a petition addressed to the highway commissioner and signed by a majority of the legal voters of the town or municipality, sets forth that the highway chosen is not the main traveled highway, the commissioner fixes a day for a hearing and determination of the question.

State Aid. Laws of 1907, chapter 112. The question of adopting the provisions of law relating to state aid is voted upon at the annual town meeting. If an incorporated town desires state aid, it must appropriate the following sums and in the following proportions to their assessed valuations, in addition to the amounts regularly raised and appropriated for highway purposes:

Assessed Valuation	Appropriation Required	State aid per one dollar locally appropriated	Assessed valuation as basis for state aid
Up to \$ 200,000	Not over \$200	\$2.00	\$ 200,000
Up to 800,000	Not over 400		
Up to 1,000,000	Not over 450	1.00	1,000,000
Up to 3,000,000	\$50 for each additional \$200,000	.92	1,200,000
	\$1,000	.85	1,400,000
Up to 4,000,000			
Over 4,000,000	Additional \$100 for each additional \$1,000,000 of valuation.	.80	1,600,000
		.75	1,600,000 and over

Unincorporated towns that have appropriated the sums as above provided, received one dollar for each dollar so appropriated.

In incorporated towns in which there are highways the commissioners of the county may appropriate fifty dollars on each one thousand dollars of valuation, if state aid is desired. (Laws of 1909, chapter 69.)

If the proper authorities of the town or organized plantation set apart, in addition to the amounts required to be set apart according to the foregoing table, a sum equal to fifty per cent. of such required amount for road construction, then such locality receives aid from the state as follows:

Assessed Valuation	State aid per \$1.00 set apart as above provided
\$100,000	\$2.00
250,000	1.50
500,000	1.25
1,000,000	1.00
Over 1,000,000	.75

State Tax. A state tax of one-third of one mill is levied on all property in the state. The annual receipts from this tax in round numbers amount to one hundred and thirty-one thousand six hundred dollars.

Maintenance. The county commissioner of each county designates what roads shall be state roads, and all highways improved by the expenditure of the joint fund are maintained by the city or town through which they run in the same manner as other highways and to the satisfaction of the state highway commissioner.

Local Supervision. The county commissioners may repair highways at the expense of the town if the latter refuse or neglect to do so. The county commissioners have general control over the highways of the county.

The town at its annual meeting elects one and not more than three road commissioners, to hold office for one year. If the town fails to elect a commissioner or commissioners, the duties imposed upon him by law are performed by the selectmen.

The commissioners go over the roads of their town at stated intervals and see that the same are in good and passable condition. They may do this in person or by agent. They have charge of the repair of roads within the town, subject, however, to the control of the selectmen. They must keep accurate accounts of all expenditures by them made in the line of their duty.

Road Revenues. Code 1903, chapter 20, section 70. Funds necessary for building and repairing roads and bridges are raised annually at the town meeting by the voters of the towns.

Statute labor. All property taxes are paid in cash.

Convict Labor. County convicts may be used to break stone for the repairing of public highways.

MARYLAND.

The State Highway Department. Chapter 141, Laws of 1908. The governor appoints three competent persons, residents of the state, and two men from the state geological and economic survey, who, with the governor, constitute the state road commission, which continues in office until its work is completed. The governor and the two men from the geological survey receive no salary as members. The other members receive an annual salary of two thousand dollars, except the chairman, who receives two thousand five hundred per annum. The commission may employ a chief engineer and assistant engineers if necessary.

Powers and duties. The commission must improve and maintain a general system of state roads. This system or plan must be determined upon before May first, 1909, and a map of the state showing the same filed with the county commissioners of every county in the state. This system of roads must be completed within seven years from the first of July, 1908, and the aggregate expenditure therefor must not exceed five million dollars.

The commission may take possession of any county road or abandoned turnpike. Before a highway is constructed or improved, the commission must furnish the plans and specifications

thereof to the county commissioners. The commission lets the contracts and the work of construction is at all times under its supervision. The commission must keep all state highways in good condition.

State Aid. Laws of 1904, chapter 225. Whenever the owners of two-thirds of the lands bounding upon any public road or section of road, not less than one mile long, petition the county commissioners to have such road constructed under the provisions of this act, the board makes such request to the state commission upon the payment, or the securing of payment, by said petitioners of ten per cent, of the cost of such work as estimated by the engineer of the commission.

State Bonds. Bonds of the state in the sum of five million dollars have been issued under the provisions of chapter 141, Laws of 1908, and no more than one million dollars of this amount may be expended in any one year.

Amount. Not more than fifty per cent. of the cost of building the highway is paid out of the state treasury. The amount received by each county is based upon the proportion its mileage of roads bears to the total mileage of the state.

Maintenance. The commission must keep all state highways reasonably clear of brush and impediments and keep the same in good condition.

Local Supervision. General supervision of the county highways is vested in the county commissioners.

Road Revenues. The commissioners of each county are authorized to levy taxes for all purposes. Some counties levy special taxes for road purposes, others appropriate money out of the general fund for the building of roads.

Statute labor. All property taxes are paid in cash.

Convict Labor. Laws of 1908. The county commissioners may authorize the working of county prisoners on the highways.

MASSACHUSETTS.

The State Highway Department. Chapter 47, R. L. 1902. The state highway commission consists of three members appointed by the governor for a term of three years, each receiving an

annual salary of two thousand five hundred dollars, except the chairman, who receives three thousand five hundred dollars per annum. Each member devotes his entire time to the duties of his office and is allowed his actual and necessary traveling expenses. The commission may appoint engineers and clerks.

Powers and duties. The commission prepares maps showing the location of all public ways and highways and the places where road materials may be found. It holds at least one public meeting in each county annually for the discussion of the problem of good roads.

The commission has full control over state highways and prepares plans and specifications for the construction of the same. It may accept or reject bids for the construction or improvement of state highways.

State Aid. Acts of 1909, chapter 464. If the authorities in a county, city or town decide that good policy demands that the state lay out or take charge of a new or an existing highway within their jurisdiction, they apply to the commission accordingly. If the commission grants the application, it prepares a plan of the proposed way and files a copy thereof with the local authorities.

Appropriation. The state highway commission is authorized to expend during the years 1908, 1909, 1910, 1911 and 1912 the sum of two million five hundred thousand dollars for the construction of state highways, but no more than five hundred thousand dollars may be expended in any one year. (Acts of 1907, No. 446.)

Amount. One-fourth of any money expended by the state for the construction of state roads in any county must be returned to the state treasury with interest at the rate of three per cent. within six years and in such installments as the commission, with the approval of the auditor of account, may determine. Money so returned is applied to the appropriation to be expended by the commission. (R. L. 1902, chapter 47.)

Maintenance. The commission exercises permanent control over such highways and keeps them clear of brush. It contracts with the city or town within which the highway lies or with a private person for the maintenance and repair of state roads

The expense is borne partly by the municipality. An amount not exceeding fifty dollars per mile is assessed upon the town or city within which the road lies to be applied to the cost of maintaining and repairing the same.

Local Supervision. The county commissioners have general authority over the highways in their respective counties. They determine the necessity of laying out new ways or of relocating and repairing existing ones.

The selectmen of the town exercise original and concurrent jurisdiction with the county commissioners over highways within their towns. Appeals may be taken to the county commissioners from the decision of the selectmen in road matters. Each town may annually elect a road commissioner to perform certain duties imposed upon him and he has the power of the selectmen over town ways and highways. Or a town may also elect a surveyor of highways, who shall have exclusive control of the ordinary repair of highways, town ways, streets, and bridges therein without being subject to the authority of the selectmen.

Road Revenues. Laws 1902, chapter 25, section 15. Funds for laying out, discontinuing, making, altering and repairing highways¹ and town ways are appropriated at the town meeting.

Chapter 12. The counties assess on the towns the amount necessary to meet the state appropriation for highways and other purposes.

Statute labor. There is no statute labor in this state.

Convict Labor. Revised Laws, chapter 225, section 59. The prison commissioners may employ the prisoners in any jail or house of correction, within the precinct of the prison, in preparing road material, but no machinery except such as is operated by hand or foot power shall be used in connection with such employment.

Section 61. Material so prepared may be sold to the county commissioners or to city and town officers who have care of public roads. All material not so sold is purchased by the state highway commission at a fair and reasonable price for use on state highways. The prison commissioners may employ pris-

¹The word "highway" includes county roads.

oners upon material furnished by the state highway commission, and the latter then pays for the labor at such price as may be agreed upon by the prison commissioners and the state highway commission.

MICHIGAN.

The State Highway Department. Chapter 5, Act No. 283. Laws of 1909. The chief officer of the highway department is the state highway commissioner, nominated and elected by the people, for a term of four years, in the same manner as justices of the supreme court. He receives an annual salary of two thousand five hundred dollars. He may appoint a competent civil engineer at a salary of one thousand eight hundred dollars per annum.

Powers and duties. The commissioner may require local highway authorities to report such facts and information as he may call for on forms prescribed by him. He must furnish plans and specifications for state aid roads and prepare maps showing the location of road material and highways in the state. He inspects road work and ascertains whether or not it is up to standard. He holds road institutes in the counties, which the county and township highway commissioners attend, at such times and places as the state highway commissioner determines. He gives expert advice generally and sends experts to the localities when the magnitude of the work justifies it. He may withhold the state reward if roads are not kept in proper repair.

State Aid. If a county under the county road system through its county commissioners, or a township through its board of supervisors, or counties or townships respectively acting conjointly on boundary line roads, notifies the state highway department that arrangements have been made to improve a mile or more of public wagon roads, asks for an allotment of the state reward and files with the department a profile of the road, prepared by a competent surveyor, and applied for plans and specifications, the state commissioner furnishes the plans and specifications, and allots the proper share of the state reward, if the same has not been exhausted. The allotment is paid as soon as the commissioner has inspected the roads and ascertained that they are up to standard.

Appropriation. The sum of one hundred fifty thousand dollars was appropriated for each fiscal year ending June 30, 1910, and June 30, 1911. Ten thousand of this amount is applied to defray the expenses of the state highway department and the remainder constitutes the state reward fund.

Amount. The state reward is paid as follows: For clay gravel, two hundred and fifty dollars; for gravel, five hundred dollars; for stone gravel or gravel stone, seven hundred and fifty dollars; and for stone roads, one thousand dollars per mile.

No township may receive state reward in any one year for the construction of more than two miles of road. If more is built, it will be paid for the following year, provided, sufficient money has been appropriated for this purpose.

Maintenance. Section 12. The state highway commissioner may refuse to grant any further road reward to any township or county that does not keep state rewarded roads in proper repair, and he must inform township officials accordingly.

Local Supervision. County Road System. On the initiative of the people, the township or the supervisors of the county, the matter of adopting the system is voted upon.

If adopted, not more than *three county road commissioners are elected* in the county, the number to be fixed by the board. In the first instance, they may be appointed by the board of supervisors.

The county road commissioners may at any time declare a road a county road, and parts of streets may, with the consent of the local highway authorities, also be declared county roads. Any road embraced within such determination comes within the exclusive jurisdiction of the county road commissioners and the township or municipality within which the same is situated is relieved of all responsibility therefor. The board may abandon or discontinue any such road at any time by majority vote, whereupon jurisdiction over it reverts to the former authority.

The county road commissioners have power to macadamize, drain or improve in any manner any road under their control.

Before the first day of October of each year the board fixes the amount of tax to be levied for the purposes mentioned in

the preceding paragraph. The board must state the amount asked for each road. This tax may not exceed two mills on each dollar of assessed valuation, except in certain counties. This statement is then referred to the county board of supervisors for their approval or rejection. This board may disapprove the expenditure planned by the board of road supervisors for any or all roads, and the latter may not expend anything on roads or sections not so approved by the board of supervisors. When the board of supervisors has determined the amount of taxes to be levied for the above named purposes, the same are apportioned among the townships and cities according to the assessed valuations of their property.

It is the duty of the county to keep in repair all county roads, and they must respond in damages for injuries resulting from failure to keep such roads in a reasonably safe condition.

County Reward. Any township, in counties under the county road system, in which a county road has not been built within a year, and which raises sufficient funds to build a mile in a year and builds such mile and receives state reward thereon, is entitled to receive an equal amount from the county. But if the township has paid into the county road fund a less amount than it received from the state, it receives an amount equal to the sum it has paid in for that year.

Laws of 1907. P. A. 268. Any two or more organized townships or any one or more townships and one or more contiguous villages or cities may form a good roads district if the board of supervisors of the county is petitioned by at least ten freeholders from such district. The question is then submitted to a vote of the electors of the townships and cities or villages petitioning and if the proposition is carried the district so organized proceeds under the county road law so far as the same is applicable.

A supervisor of roads is elected for each township and an overseer for each road district within the township. The township supervisor must report annually to the township board.

Road Revenues. Counties which have adopted the county

road system, may levy taxes for highway purposes. In counties where the assessed valuation does not exceed twenty millions of dollars the tax is limited to three dollars on each one thousand dollars thereof; over twenty millions but less than fifty millions, the limit is two dollars on each one thousand dollars; more than fifty millions but less than one hundred millions, one dollar on each one thousand dollars; and where the assessed valuation is over one hundred millions, the tax is limited to fifty cents on each one thousand dollars of assessed valuation.

Township road taxes. The highways in every organized township in the state are laid out, improved and maintained by two money taxes. One tax is known as the road repair tax, and is assessed on all property in the township outside of incorporated villages. This tax is limited to fifty cents on each one hundred dollars of taxable valuation, except in townships with an assessed valuation of less than two hundred thousand dollars, where the tax is limited to one dollar on each one hundred dollars valuation.

The other tax is known as the highway improvement tax and is assessed on all taxable property in the township. This tax may not exceed fifty cents on each one hundred dollars valuation, except in townships with an assessed valuation of less than two hundred thousand dollars, where the tax must not exceed one dollar on each one hundred dollars valuation.

County bonds. Laws of 1907. No. 168. Counties that have adopted the county road system may issue bonds for highway improvement provided that such issue be first approved by a vote of the people. The election may be ordered by the county supervisors on the petition of twenty-five freeholders residing within the territory affected. No bond issue may exceed three per cent of the assessed valuation of the county or district under the county road system.

Counties or parts of counties that have adopted the county road system may levy a tax of not exceeding two dollars on each one thousand dollars of assessed valuation.

Township bonds. Act 47, 1907. The township board, if petitioned by at least five freeholders of the township, may issue

bonds of the township, to an amount not exceeding five per cent of its assessed valuation, if sixty per cent of the legal voters of such township, voting upon the proposition at a township meeting, a general election or a special election called by the board for that purpose, vote in favor thereof.

Statute labor. Statute labor has been abolished in this state.

Convict Labor. Laws of 1897, section 2659. The board of supervisors of any county may order that any or all male prisoners, over the age of eighteen years, under sentence in the county jail, capable of performing manual labor, be required to work upon public highways, streets, alleys or in any quarry or pit in the preparation of road material. All work done by prisoners is done under the direction of the township highway commissioner or the authorities of the city or village, and the prisoners are under the control of the sheriff.

Section 2661. The sheriff keeps a record of the number of days worked by each prisoner, but no prisoner is entitled to any compensation. The sheriff makes a full and complete report to the board of supervisors at each regular session. (As amended by Laws of 1909, Act No. 10.)

MINNESOTA.

The State Highway Department. Laws of 1905, chapter 163. The governor appoints three commissioners for a term of three years who constitute the state highway commission. Not more than two members may belong to the same political party.

The commissioners serve without compensation except for their actual traveling expenses while engaged in performing their duties as highway commissioners.

The commission appoints a secretary who must be a civil engineer and practical road builder, who receives an annual salary of one thousand eight hundred dollars.

Powers and duties. The commission must inquire into the best methods of road construction in other states, ascertain the location of suitable road materials and hold public meetings throughout the state when deemed advisable. It reports annually to the governor the number of miles of state roads built during the year, their cost and general character, the needs

of the roads and other pertinent information. The commission distributes the state aid fund among the counties. The commission prepares rules and regulations governing the construction and improvement of state roads. The county boards determine what roads shall be state roads and may then improve them in accordance with the rules of the commission.

The state engineer, when practicable, makes the necessary surveys and prepares the plans and specifications for all state roads. If not done by the state engineer, all surveys, nevertheless, must be reported to him. The county board receives the bids and lets the contract. It may also appoint a superintendent of construction who prepares an itemized statement of the cost and reports the same to the state engineer.¹ If the county authorities refuse or neglect to comply with the rules of the commission, engineer or road expert relating to road construction or improvement, the county loses a portion of its share of the state road and bridge fund.

State Aid. The state aid fund is derived from a tax of one twentieth of one mill on each dollar of valuation of all property in the state. No county may receive less than one half per cent or more than three per cent of this fund. The commission determines the amount each county receives, taking into consideration the extent of the county, the amount expended by it in road construction and the expense connected with the development of new territory.

Appropriation. Laws of 1909, chapter 91. The sum of three hundred thousand dollars is annually appropriated to aid in the repair and construction of bridges in the state. This amount is apportioned as the legislature may direct.²

¹Referring to this provision of the laws of 1905 which authorizes the appointment of a superintendent of each piece of work, the commission says in the report for the year 1908, p. 92: "Such a policy has been found very unsatisfactory in a majority of cases, owing to the fact that many superintendents so appointed have no knowledge of surveying or drainage. * * * In all cases where a competent surveyor or engineer has been employed as superintendent the results reported to this office show a vast improvement over the old haphazard method of ditching and grading by guess."

²This law was declared unconstitutional by the state supreme court in the case of *Cooke v. Iverson*, 108 Minn. 122 N. W. The court held that by appropriating money for the constructing of roads the state thereby became a "party to a work of internal improvement," in violation of the constitution.

Amount. No more than one-third of the cost of building any bridge or road may be paid by the state out of the state aid fund.

County organization. Chapter 458, Laws of 1907, provided for a county superintendent of roads and a township inspector in counties having a certain population—less than two hundred thousand. The purpose of this act was to provide skilled supervision of the work of improving state roads. But this act has been declared void.¹

Local Supervision. The present system provides for no other supervision than that of ordinary township road overseers except in townships that have voted to require the payment of all road taxes in cash, where a competent road builder is appointed as township highway inspector. He has supervision of the construction and maintenance of all roads and bridges not under the control of the county board or of the state highway commission.

Road Revenues. Statutes of 1905, section 1205. County road tax. The county board, at its July meeting may include in its annual tax levy an amount not exceeding one mill on the dollar of the taxable valuation, for the general road and bridge fund.

Township road tax. Section 1226. All real and personal property in any town may be assessed for road puposes an amount not exceeding one dollar for each one hundred dollars assessed value. This tax may be paid in labor.

Bonds. Section 784. Counties may issue bonds for the construction of special highways as authorized by law. Towns may issue bonds for the opening of town roads and the repair of bridges.

Statute labor. About seventy-five per cent of the townships in this state are still under the statute labor system, not more than one-fourth of them requiring road taxes to be paid in cash.

¹This law was declared unconstitutional by the state supreme court in the case of Hjelm v. Patterson, 105 Minn. 256. "The basis of classification (population) adopted in the statute under consideration," says the court, "is purely arbitrary and the act is therefore unconstitutional."

NEW HAMPSHIRE.

The State Highway Department. Laws of 1905, chapter 35 (amend by laws of 1909). The control of the work to which this act relates, so far as the state is concerned, is committed to the governor and council who appoint a state engineer and fix his salary. The governor and council make a biennial report to the general court embodying a statement of expenditures and recommendations.

Powers and duties. On the application of the local authorities the governor and council may furnish the services of any engineer in the employ of the state for consultation and advice concerning the work or improvement. The governor and council must provide the plans and specifications for any work paid for out of the state joint fund and cause copies of surveys and plans of state highways to be filed in the office of the secretary of state. The governor and council make rules and regulations governing applications for state aid.

State Aid. State aid is obtained for any county through application of its board of commissioners.

Each town must set apart the following amounts, out of the funds raised for the repair of highways within its limits, for the permanent improvement of its main highways under the advice of the state engineer:

Valuation of Town	Amount that must be set Apart for \$1,000 of Valuation
Up to \$2,000,000	\$ 1.00
Up to 3,000,000 .....	.75
Up to 5,000,000 .....	.50
Up to 15,000,000 .....	.33 1-3
Over 15,000,000 .....	.25

The county commissioners of counties within which incorporated towns and places are located set apart from the amount raised therein for the repair of highways one dollar on each one thousand dollars of the valuation.

If a locality desires state aid as contemplated by this act it must set apart a sum equal to fifty per cent of the amount required to be set apart according to the foregoing table.

The governor and council apportion to each locality that has complied with the provisions of this act for each dollar set apart as required above, the following amounts:

Valuation of Towns.	Amount Apportioned.
Up to \$ 100,000	\$ 3.00
Up to 250,000	1.25
Up to 500,000 .....	.60
Up to 1,000,000 .....	.40
Up to 3,000,000 .....	.25
Over 3,000,000 .....	.20

The amount apportioned by the state and set apart by the localities under the preceding paragraphs constitute the joint fund for the improvement of such highways within the localities as the governor and council and the local authorities having jurisdiction over highway expenditure may designate. But no portion of this fund may be expended within the compact portion of a city or village, except in towns of less than two thousand five hundred population, such compact portion to be determined by the governor and council. Localities that do not apply for state aid may expend the money set apart by them on such roads as the selectmen may designate.

Appropriation. The state annually appropriates one hundred twenty-five thousand dollars to carry out the purposes of this act. Bonds of the state amounting to one million dollars and the proceeds thereof are applied to the purposes herein set forth.

Maintenance. Highways improved by the joint fund must be maintained and repaired by the locality and at local expense in a manner satisfactory to the governor and council. If the work of repair is neglected the state does it and the expense is added to the state tax for that locality the following year.

Local Supervision. The control of roads and highways is vested in the commissioners of the counties and the selectmen of the towns. The commissioners prescribe grades for highways they order opened and have general supervision of the same.

Road Revenues. Laws 1899, chapter 29, section 2. Each town, at its annual town meeting, raises and appropriates for the repair of highways and bridges a sum not less than one-fourth of one per cent of the valuation of the polls and ratable estate on which other taxes are assessed by the town. In addition to such appropriation each town may raise as much more as is necessary, but no town "may be required to raise more than fifty dollars per mile for repair of roads and bridges."

NEW JERSEY.

The State Highway Department. G. S. 1795-1895. Vol. 3, p. 2902. The governor appoints a commissioner of public roads, subject to confirmation by the senate, for a term of three years. He receives an annual salary of five thousand dollars and an allowance of four thousand dollars for hiring clerks and engineers and supervisors and a further allowance of two thousand five hundred dollars for the purpose of employing supervisors. (As amended, chapter 70, Laws of 1906.)

Powers and duties. He performs the duties with respect to public roads previously performed by the president of the state board of agriculture. He collects data relating to the improvement and construction of roads and reports to the legislature annually what roads are built by state aid, the cost thereof and the general operations of the office the past year.

The commissioner awards contracts for the improvement of roads constructed under this act. He also examines the natural character of the soil upon which the road is to be built and ascertains all important facts in relation to the work before approving the plans and specifications of the improvement as submitted by the board of freeholders of the county. He may reject them if conditions do not justify the undertaking. He may also reject the contract for doing the work if in his judgment the best interests of the county seem to require it.

After the contract has been awarded the state commissioner appoints a competent supervisor to have charge of the work.

State Aid. The owners of two-thirds of the lineal feet, or the area of the land fronting on any public road may petition

the county board of freeholders that such road be improved under the provisions of the state aid law. If it also appears that ten per cent of the cost of such work has been appropriated by the locality, then the board must order such improvement to be made if the road is not less than one mile in length or connects with some other improved road or street. (Laws of 1908, chapter 53.)

The board of freeholders for the county then pass a resolution ordering the improvement, prepare plans and specifications and then submit the same to the state commissioner for his approval or rejection. The county board then advertises for bids for doing the work, subject to the approval or rejection of the state commissioner.

Appropriation. The total annual appropriation, used for defraying the one-third paid by the state, is three hundred thousand dollars.

Amount. One-third of the cost of building roads under this act—county roads, they are called—is paid by the state, fifty-six and two-thirds per cent by the county and ten per cent by the township.

The state aid policy was adopted in 1892 and since that time and including 1909, the sum of three million three hundred and one thousand five hundred and ninety-five dollars and ten cents have been paid out of the state treasury for this purpose. Over fifteen hundred miles of improved roads have been constructed.

Maintenance. The board of freeholders of the county keep roads built by state aid in repair and if they neglect to do so the state commissioner notifies the state comptroller who withholds the payment of any portion to which the county may have become entitled until such work is done.

Local Supervision. After the first county road has been constructed in any county under the preceding act, the board of freeholders must appoint a county supervisor of roads to hold office for three years.¹ In other counties the control of the

¹It is strongly urged that after the first county road has been constructed under state aid it shall be made the duty of the county board to appoint a suitable person as county engineer. In counties where provisions for a county engineer have been made the work is better and more economically done, while in the others there is a lack of uniformity and efficiency in the work. Report Commissioner of Public Roads, 1908, p. 11.

roads is in the board of freeholders who levy the necessary taxes.

Road Revenues. The board of chosen freeholders levy the county road taxes.

County bonds. The county may issue bonds to pay its share (two-thirds) of the cost of permanently macadamizing or improving roads within its limits if in the opinion of the freeholders thereof a tax levy would be too burdensome. Such bonds may not run less than six nor more than thirty years and bear interest not exceeding five per cent per annum. (Ch. 58, Acts of 1906.)

Statute labor. All road taxes are paid in cash.

NEW MEXICO.

The State Highway Department. Laws of 1909, chapter 42, section 1-11. In 1909 a law was passed creating a territorial highway commission, composed of three members, the governor, the commissioner of public lands and the territorial engineer, all of whom serve without compensation.

Powers and duties. Said highway commission meets in the office of the state engineer four times a year and may hold special meetings when necessary.

The commission has general charge and supervision of all highways and bridges in the state constructed or maintained in whole or in part by state aid.

State engineer. The state engineer is the engineer of the roads commission and is subject to the orders of the same. He has supervision over all such highways as have been specified, and he also has supervision of all county bridges built by contract where the cost exceeds one thousand dollars.

State Aid. It is the duty of the commission to construct, repair and maintain at the expense of the state, either in whole or in part, such public roads as in its judgment will subserve the general interest of the public.

State tax. The state commission is authorized to cause to be levied annually a tax of not to exceed one mill upon each dollar of taxable property in the state for road purposes. The money so collected constitutes the state road fund.

Local Supervision. Laws 1905, chapter 124, sections 1-41. The public highways in the different counties of the state are under the jurisdiction of the county commissioners of their respective counties. Said commissioners divide their counties into road districts and appoint a road overseer to take charge of the road work in each district. The compensation of the road overseer is fixed by the county commissioners, but such compensation may not exceed five dollars per day for each day's service.

Road Revenues. Laws 1905, chapter 124, section 25. County road fund. The board of county commissioners may levy a tax for road purposes of not to exceed three mills on the dollar. All property within the limits of incorporated towns and cities is not subject to this tax.

Statute labor. Laws 1905, chapter 124, section 26. Every able bodied man between the ages of twenty-one and sixty years must pay annually a road tax of three dollars, or in lieu thereof work three days on the public highways. This provision does not apply to persons living within incorporated towns or cities.

Convict Labor. Laws 1909, chapter 89, sections 1-3. It is the duty of the officer in charge of county jails in the state to compel all prisoners who are sentenced to imprisonment in such jails, to work on the public streets, public roads and around public buildings without pay or remuneration whatsoever. Convicts in the state penitentiary are worked on such roads as the state commission may designate.

NEW YORK.

The State Highway Department. Laws of 1908, chapter 330. The chapter creates a department of highways to be composed of three commissioners appointed by the governor, with the advice and consent of the senate, for a term of six years. One commissioner must be a civil engineer and an experienced road and bridge builder. The chairman, designated by the governor, receives six thousand dollars and each of the others five thousand per annum. One commissioner must belong to the minority party.

Powers and duties. The commission has supervision over highways and bridges improved by the aid of the state; it prescribes rules relating to the duties of division engineers, district county or town superintendents in respect to highways composing state or county systems and it may compel compliance with such regulations. The commission aids local road authorities in establishing grades and drainage systems and advises with them as to the construction of highways. It must prepare plans and specifications of roads and bridges when requested by the local road authorities. It investigates methods of road construction, prepares statistics and information relating to public highways throughout the state and holds annual meetings in each county or district where it furnishes information relating to highway improvement and the application of the highway law.

The commission also divides the state into not more than six divisions to each of which it assigns a division engineer, skilled and experienced in the arts of civil engineering.

The commission inspects bridges reported unsafe and instructs the district or county superintendent as to the repair of such as are condemned by it. It also inspects all state and county highways annually keeping careful reports of such inspection.

All state highways are constructed or improved by the highway commission and their maintenance and repair is under its direct supervision and control.

State Aid. The board of supervisors of the county may pass a resolution requesting that a highway be improved, as provided in this article, and giving a description of the highway. This resolution is transmitted to the state highway commission. The commission after due investigation notifies the board of its action. If improvement is decided upon the division engineer prepares the plans, specifications and costs. The plans are submitted to the proper district or county superintendent who personally examines the same and the highway proposed to be constructed. The board of supervisors then examine the plans and specifications and with the consent of the commission may make changes therein. They then request that the

highway be constructed accordingly. The county and town must make available their share of the cost before the work is commenced.

State bonds. The state recently issued its bonds in the sum of fifty million dollars for the construction of improved roads. Three million five hundred thousand dollars were expended for highways in the state and eleven million dollars have been thus expended since 1899.

Amount. The state pays the several towns as state aid the amounts based upon the amount of taxes levied therein for the repair or improvement of highways, sluices, culverts and bridges determined as follows:

1. Towns whose assessed valuation of real or personal property, exclusive of property in incorporated villages, is less than five thousand dollars for each mile of highway in such towns receive an amount from the state equal to the amount of such taxes.

2. All towns whose assessed valuation is over five thousand dollars and less than seven thousand dollars for each mile of highways receive an amount equal to ninety per cent of the amount of such taxes.

3. Towns whose assessed valuation is at least seven thousand dollars and not over nine thousand dollars for each mile of highways receive an amount equal to eighty per cent of the amount of such taxes.

4. Towns whose assessed valuation is not less than nine thousand dollars and less than eleven thousand dollars for each mile of highway receive an amount equal to seventy per cent of the amount of such taxes.

5. Towns whose assessed valuation is not less than eleven thousand dollars and less than thirteen thousand dollars for each mile of highways receive an amount equal to sixty per cent of the amount of such taxes.

6. Towns whose assessed valuation is over thirteen thousand dollars for each mile of highways receive an amount equal to fifty per cent of the amount of such taxes.

But no town may receive from the state in any one year, under this section, an amount in excess of twenty-five dollars

per mile for the total of these highways, except that in towns whose assessed valuation of property, exclusive of such property in incorporated villages, averages more than twenty-five thousand dollars for each mile of highways therein, the amount paid hereunder may not exceed one-tenth of one per cent of such assessed valuation.

Section 102. The mileage of highways to be used in determining the amounts to be paid under section 101 is determined by tables prepared by the state engineer.

Sec. 103. The state comptroller determines the amount due the several towns under the provisions of this article and draws warrants in favor of each county treasurer for the amount due to the towns within his county. The county treasurer in turn pays to the supervisors of each town the amount to which each town is entitled.

The cost of building state roads is borne entirely by the state. But the cost of building county roads is borne, fifteen per cent by the town, thirty-five per cent by the county and fifty per cent by the state.

Maintenance. State and county roads are maintained and repaired by and at the expense of the state, except that each town pays annually fifty dollars for each mile of the total mileage of state and county highways within its borders.

Local Supervision. The commission divides the state into six divisions and assigns to each a civil engineer who devotes his entire time to the duties of his office. The supervisors of each county have the power to appoint a county superintendent of highways, but if they neglect to do so the commission places such county in a district with such other counties as it deems expedient.

County superintendents may be removed by the commission for inefficiency. The ultimate authority in matters pertaining to highways constructed by state aid is in the state highway commission.

The towns have supervision and control over town ways, but the commission may prescribe rules and regulations governing the expenditure of state funds thereon.

Road Revenues. Bonds. Laws of 1908, section 142. County

or town may borrow money. If there are not sufficient funds in the county treasury to pay the share of the cost of the construction or improvement, the county treasurer is authorized or directed to borrow a sufficient sum to pay such share in anticipation of taxes to be collected therefor and to pledge the faith and credit of the county for the payment of the amount when due, with interest.

Upon the petition of the town board of any town, the board of supervisors of the county may authorize the town to borrow a sufficient sum to pay the share of the cost of the construction or improvement of a county highway which is to be borne by the town and to issue bonds therefor.

Township Taxes. Sections 90, 91-94. The town board of each town levies and collects taxes as follows:

1. The amount to be levied and collected for the repair and improvement of highways, including sluices, culverts and bridges having a span of less than five feet, which when added to the amount to be received from the state, must equal thirty dollars for each mile of highways within the town, outside the limits of incorporated villages; except that no town having an assessed valuation of three thousand seven hundred and fifty dollars or less per mile outside of incorporated villages, is required to levy and collect a tax under this subdivision of four dollars on each thousand dollars of assessed valuation.

2. Not more than fifteen hundred dollars may be levied and collected in any one year for the repair and construction of a bridge unless authorized by vote of a town meeting.

3. Not more than five hundred dollars may be levied and collected in any one year for the purchase or repair of road machinery unless authorized by the vote of a town meeting.

4. Nor more than fifteen hundred dollars may be levied and collected in any one year in any town for the repair or construction of any highway or bridge which has been damaged or destroyed, unless authorized by vote of a town meeting.

Additional tax. Section 92. Whenever the sum of one thousand dollars will be insufficient to pay the expenses necessary for the removal of obstructions caused by snow and when-

ever the amounts levied are deemed insufficient for the purposes mentioned an additional sum may be raised at a special or regular town meeting, not exceeding one-third of one per cent upon the taxable valuation.

Statute labor. All road taxes are paid in cash.

Convict Labor. The superintendent of state prisons may employ not to exceed three hundred convicts confined in state prisons in the improvement of public highways outside of incorporated cities or villages.

OHIO.

The State Highway Department. Statutes 14614-11, section 1. The governor appoints a state highway commissioner for a term of four years at an annual salary of two thousand five hundred dollars and actual traveling expenses not exceeding five hundred dollars annually. The commissioner may appoint an assistant with the advice and consent of the governor.

Powers and duties. The purpose of this department is to instruct, assist and co-operate in the building and maintenance of roads in such counties as comply with the provisions of this act.

The state highway commissioner must approve applications for the improvement of roads by state aid and he must prepare plans and specifications of such roads and also submit to the county commissioners estimates of the cost of the work. He advertises for bids for doing the work. When the work is completed he ascertains the total cost thereof and apportions the same among the state, county, township and abutting property.

State Aid. The county commissioners may by resolution order the permanent improvement, with state aid, of any public road, not less than one mile in length. Or if the board does not act, the owner of fifty-one per cent of the lineal feet along such road may petition the board to take favorable action on the petition if deemed for the best interests of the public. The location of the road and the material to be used is subject to the approval of the state highway commissioner. If the expense of constructing all the road applied for ex-

ceeds the available funds, the county board and the state highway commissioner determine what roads shall be improved. The highway commissioner must examine and approve all roads to be improved before work may be commenced.

Appropriation. The state aid fund is an annual appropriation of one hundred fifty-eight thousand dollars which is equitably distributed among the counties.

Amounts. The state pays fifty per cent of the cost. The remaining fifty per cent is paid, twenty-five per cent by the county and twenty-five per cent by the township. Fifteen per cent of the twenty-five per cent charged to the township is paid by the whole township and ten per cent is a charge upon the abutting property. The township trustees apportion the amount to be borne by the abutting property according to the benefits accruing to the owners of the land.

Maintenance. State highways—highways constructed by the aid of the state—are maintained in standard condition of repair by the commissioners of the county within which they are situated at county expense. If the local authorities neglect their duties in this matter, the state highway commissioner may do the work and deduct the cost from any funds that may be apportioned to the county in aid of highway improvement. (Laws of 1908.)

Local Supervision. The general authority over roads and highways is in the board of county commissioners. The commissioners of districts organized for the purpose of improving or constructing highways may appoint an engineer to do the necessary work. These road commissioners are appointed by the board of county commissioners when two or more townships have by vote formed themselves into a road district.

If one hundred or more taxpayers of a township petition the board of trustees to improve a road or roads within its borders or if the trustees deem it for the best interests of the township, the trustees submit the question to a popular vote. If the proposition is carried the trustees appoint three disinterested freeholders as commissioners to serve for three years who designate the roads to be improved, hire an en-

gineer to prepare the plans and specifications and superintend the work.

Road Revenues. County taxes. The county commissioners, at their March or June sessions, annually, may levy on each dollar of assessed valuation in their county a tax for road and bridge purposes as follows:

Valuation.	Tax.
Over \$80,000,000 and less than \$120,000,000.....	1/2 mill
Over \$50,000,000 and less than \$ 80,000,000.....	7-10 mill
Over \$20,000,000 and less than \$ 50,000,000.....	1 1-10 mills
Over \$10,000,000 and less than \$ 20,000,000.....	1 1/2 mills
Over \$ 5,000,000 and less than \$ 10,000,000.....	3 mills
Up to \$5,000,000	5 1/2 mills

State and county improvement fund. The county commissioners in addition to the levy authorized for road and bridge purposes, levy on each dollar of taxable property within their county, a tax not exceeding five-tenths of a mill for the creation of a state and county improvement fund.

County bonds. To pay for the work of improving highways at the instance of petitioners from three or more townships the commissioners may issue bonds of the county having not more than three years to run.

Bonds may also be issued by the commissioners to pay the shares of townships and landowners of the cost of improvements of highways forming boundary lines between counties.

Township bonds. Township trustees may issue bonds for their township to pay road improvements.

District bonds. The township trustees may form their township into a road district for the purpose of macadamizing or improving public ways therein. Bonds of the road district may then be issued, in an amount not exceeding one hundred thousand dollars. But such bond issue must first be approved by a majority of the votes cast upon the proposition.

Township tax. The trustees of any township may levy a tax not exceeding six mills in any one year on each dollar of assessed valuation in their township, for the purpose of improving by macadamizing and graveling the public highways.

Statute labor. All male persons between the ages of twenty-one and fifty years, unless by law exempt, are required to perform two days' labor on the highways, or in lieu thereof pay the road superintendent or street commissioner the sum of three dollars within three days after being notified to perform such work. All property road taxes are paid in cash.

Convict Labor. Convicts may be required to crush stone or manufacture road material. The prison authorities furnish such material on requisition by counties or townships.

PENNSYLVANIA.

The State Highway Department. Acts of 1905, No. 220. The governor, with the advice and consent of the senate, appoints a highway commissioner, who must be a civil engineer and an experienced road builder, for a term of four years. He receives an annual salary of six thousand five hundred dollars and actual traveling expenses. He may appoint as assistants one deputy at a salary of three thousand six hundred dollars, one competent civil engineer at three thousand dollars, and twelve civil engineers at a salary of two thousand four hundred dollars each per year.

Powers and duties. The state highway commissioner prepares plans and makes the necessary surveys and estimates of the cost of the work of constructing or improving roads by state aid funds. He also apportions the state aid fund among the counties on the basis of the mileage of township improved roads. The standard of construction is fixed by the state highway department in a manner best adapted to the locality in which the highways are located. The highway commissioner may reject any and all bids for doing the work if the prices are materially higher than his own estimates.

The highway commissioner must make a complete survey of all roads in the state and prepare a general highway plan for the state. He must compile highway statistics as to mileage, condition and cost of roads. He must investigate road building generally and he may be consulted by local highway authorities. He must annually submit to the governor a report

containing the statistics and information herein mentioned, together with a statement of the expenses of the department.

State Aid. How obtained. On petition from the supervisors of any township, the county commissioners apply to the state highway department for the co-operation of the state in improving permanently the principal highway within such township. A cash road tax must be levied by each township where such road improvement is to be made, and any township may issue bonds to pay its share of the cost of the improvement. But if a petition, signed by the owners of the major portion of the real estate in said township, is addressed to the county commissioners protesting against such improvement, then no action is taken, provided that the protest be received within thirty days of the receipt of the petition from the township supervisors.

Appropriation. The sum of six million three hundred fifty-six thousand two hundred and thirty-two dollars and forty-seven cents was appropriated to carry out the provisions of this act. Of this amount eight hundred fifty-six thousand two hundred and thirty-two dollars and forty-seven cents was available during the year 1905; one million two hundred and fifty thousand dollars for each of the two years following and one million five hundred thousand dollars for the next two years thereafter.

Amount. The expense of improving highways under this act is paid three-fourths by the state, twelve and one-half per cent by the county and twelve and one-half per cent by the township within which the improved road lies.

Maintenance. Ten per cent of the amount available for state aid under this act is set aside for the maintenance of improved highways and the state highway commissioner apportions the same among the counties and towns applying for it in proportion to the mileage of improved highways therein. But the amount each town or county receives may not exceed in any one year three-fourths of the average annual cost of maintenance or three-fourths of what the cost of maintenance, in the opinion of the state highway commissioner, should be. If the town or county refuse or neglect to keep a high-

way improved under contract with the state in suitable repair, the state highway department may do so at the expense of the locality.

Local Supervision. The roads of the county are under the supervision and control of the county commissioner. The commissioners may, with the approval of the grand jury and the court of quarter sessions, specially improve any road or roads selected. A plan of the system to be improved is prepared by the board and the roads become county roads and are maintained at county expense.

In townships of the second class three road supervisors are elected who serve for a term of three years.¹ These divide the townships into road districts of not less than five miles of road to each, and appoint a road master for each such district who must himself work upon the roads and see that the work is properly done within his jurisdiction.

Road Revenues. Acts 1895, No. 251, section 14. The county commissioners of any county may levy a road tax of not to exceed two mills on the dollars, upon all real and personal property in the county for improving important county roads.

Township road tax. Acts 1905, No. 107, section 2. The township board of supervisors may levy a tax of not to exceed ten mills on the dollar of all taxable property, trades and occupations for the purpose of constructing and repairing bridges. An additional ten mills may be levied by order of the court of quarter sessions, upon the petition of the board of supervisors and with their unanimous recommendation.

Bonds. Acts of 1905, No. 318. The commissioner may borrow money and issue bonds for building and improving public highways. The amount of such issue must not exceed one per cent of the assessed value of all taxable property in the county at the last preceding triennial valuation. Such bonds bear interest at a rate not exceeding four per cent per annum.

The commissioners may not in any one year issue bonds in excess of one-tenth of one per cent of the total valuation of

¹Townships are classified according to population, those having at least three hundred to the square mile being of the first and all others of the second class.

all taxable property as indicated by the last triennial assessment.

Statute labor. Acts of 1909, No. 566. By this act it is provided that all road taxes shall be paid in cash. But townships may at their annual meeting, by majority vote, adopt the system of road taxes by work on the public roads.

Any township that collects its road taxes in cash receives from the state fifty per cent of the amount of road taxes collected in said township, but no township may receive more than twenty dollars for each mile of township road within it. Five hundred thousand dollars are appropriated to carry out the purposes of this act.

Convict Labor. Laws of 1907, Act 191. Male prisoners may be required to labor on the public highways if deemed expedient by the prison board.

RHODE ISLAND.

The State Highway Department. General Laws of 1909, chapter 84. The governor appoints, with the advice and consent of the senate, a state board of public roads consisting of five qualified electors, one from each county of the state, to hold office for four years. The members receive no compensation except for their necessary traveling expenses. It may expend five thousand dollars annually for clerk hire.

Powers and duties. The board reports annually to the general assembly and makes recommendations as to re-locating, re-grading and improving of the main highways of the state with a special view to the connection of the same with the main highways of adjoining states. No work, other than preliminary surveying, is done upon state highways until the report has been approved by the assembly and the money appropriated for such purposes. The board then directs and controls all expenditure of all such appropriations and makes all contracts necessary for that purpose. The board supervises the maintenance of state roads—roads built as aforesaid.

State Aid. Rhode Island builds its roads at state expense and does not give aid to the counties or localities.

Bonds. Bonds of the state in the sum of six hundred thou-

sand dollars were issued in 1906 to provide for a highway construction fund.

Maintenance. State roads are maintained by the state and at its expense.

Local Supervision. Highways are repaired and constructed under the direction of the town council. The council divides the town into not more than four districts and annually elects one surveyor of highways for each district. The appropriation for highway purposes is made by the town meeting. All work is done under the direction of the town council and it may order the highways to be graded and sidewalks to be built therein.

Road Revenues. General laws 1909, chapter 83, section 3. Town taxes. The electors of each town, at a regularly called meeting, appropriate such sum of money as said electors may deem necessary for the maintenance and repair of its highways and bridges.

Statute labor. All road taxes are paid in cash.

VERMONT.

The State Highway Department. P. S. 1902, chapter 172, section 4002. The governor appoints one highway commissioner, with the advice and consent of the senate, to hold office for a term of two years and at an annual salary of one thousand eight hundred dollars.

Powers and duties. Section 4003. The commissioner makes all necessary rules and regulations governing the expenditure of state funds apportioned to the towns or incorporated villages for the improvement of roads. He also prepares plans and specifications for road building and advises local road commissioners in reference thereto.

Section 4004. The commissioner, with the advice and consent of the governor, appoints one supervisor for each county who acts as his agent and assists him in supervising the expenditure of state funds and the construction and improvement of roads.

The county supervisor and the state commissioner approve the selection of roads to be improved by state funds.

The highway commissioner calls a meeting of road and street commissioners annually where topics of his choosing are brought forward and discussed.

State Aid. Public Acts, 1908, No. 97. Application for state aid is made by the towns to the state highway commissioner. Roads to be improved by state aid are selected by the selectment of the town and the town road commissioner, subject to the approval of the county supervisor and the state highway commissioner. If a town votes a sum of money in excess of the amount required to be expended by it, the highway commissioner apportions to such town a sum equal to the amount so voted if not less than one hundred dollars nor more than five hundred dollars.

Appropriation. The sum of seventy-five thousand dollars is annually appropriated to carry out the provisions of this act. There is also a regular appropriation of one hundred thousand dollars. A state tax of five cents on the dollar is annually assessed on all property. The proceeds are apportioned among the towns to be used in support of highways.

Amount granted. The state pays one-half of the cost and the town the other half.

Maintenance. Highways selected for improvement by state aid are maintained at the expense of the towns within which they lie.

Local Supervision. P. S. section 4004. The state highway commissioner, with the advice and consent of the governor, appoints annually supervisors not exceeding one for each county who act as his agents and assist him in supervising the expenditure of the money apportioned and appropriated by the state for highway improvement. They inspect roads built by state money and receive as compensation not more than three dollars per day to be paid by the state treasurer.

The town elects one or two road commissioners who serve for three years. The commissioners superintend the expenditure of the highway tax and have charge of keeping in repair the highways of the town.

Road Revenues. Public statutes 1906, section 3955. Tax. For keeping in repair the highways, the towns annually ap-

propriate a sum not less than one-fifth of the grant list of the town.

Section 3968. The county road commissioners for unorganized towns and gores may levy a highway tax in any one year of not to exceed thirty-five per cent of the grand list of such unorganized town or gore.

Bonds. Public statutes 1906, section 3574-76. A town or incorporated village may issue bonds, to an amount not exceeding three times its grand list, for the purpose of purchasing road making apparatus and for building permanent highways.

Section 3576. Such bonds may be issued for a term not exceeding twenty-five years and at a rate not exceeding five per cent.

Statute labor. All taxes are paid in cash.

Convict Labor. Section 6105. The prison board in each county may work county prisoners on the public highways.

VIRGINIA.

The State Highway Department. Laws of 1906, chapter 73. The governor appoints, subject to the confirmation of the general assembly in joint session, a citizen of the state and civil engineer for state highway commissioner. His term of office is six years and his annual salary is three thousand dollars and necessary traveling expenses. The highway commissioner together with the professor of civil engineering of the University of Virginia, of the Virginia Military Institute and the Virginia Agricultural and Mechanical College and Polytechnic Institute, constitute the state highway commission.

Powers and duties. When the local road authorities of any county decide to improve permanently any road, they apply to the state highway commission for a civil engineer to view the proposed road. If the state highway commissioner is, after investigation, convinced that the proposed improvement is upon a main traveled highway, he prepares the plans, specifications and estimates of the cost of the work and forwards the same to the local authorities.

The state highway commissioner has general supervision over

the construction and repair of the main traveled roads of the state and he must supply technical information when requested. He may also call into consultation the professor of civil engineering of any of the institutions named above.

The state highway commissioner advertises for bids and approves or disapproves the contract after it has been let by the local authorities.

State Aid. Laws of 1908, chapter 76. The road authorities of the county must apply to the state highway commission if state aid is desired, agreeing in such application, in behalf of the county, that the county will pay one-half of the expense of construction. The state aid fund is apportioned among the several counties according to the amounts of state taxes paid into the state treasury by each of the counties the next preceding year, on realty, personalty, income and including capitation tax.

Appropriation. Beginning with the fiscal year commencing March first, 1909, the sum of two hundred and fifty thousand dollars is annually appropriated to carry out the provisions of this act.

Local distribution of cost. The road authorities of each county may determine what part, if any, of the fifty per cent to be borne by the county shall be paid by the smaller road divisions of the county and private contributions to be used on account of such expenses may be accepted by the county.

Maintenance. Highways built by state aid are maintained under the supervision of the state highway commissioners.

Local Supervision. Acts of 1908, p. 411-12. The board of supervisors of each county appoints a county superintendent of roads, if deemed necessary, to hold office for two years at a salary fixed by it, who must either be a civil engineer or well versed in road building. He superintends the opening and repairing of county roads and bridges within the county and acts as purchasing agent of all materials and supplies required in the prosecution of such work. He is subject to rules and regulations prescribed by the board of supervisors and the state highway commissioner.

The superintendent has charge of tools and machinery need-

ed for road work and furnished by the board of supervisors, and so far as possible supervises personally the working and opening of all roads. He also hires teams and wagons needed to work said roads. He must generally supervise roads and see that the same be kept in good condition.

Road Revenues. Taxes. Acts of 1908, chapter 318. General levy. The board of supervisors of each county annually levy, along with the county tax, a road tax upon all taxable property in the county, not to exceed forty cents on each one hundred dollars of assessed valuation. This tax is applied to the building and repair of roads and bridges, defraying the county's proportion of expense of construction of any public road therein for which state aid is obtained, and the payment for road machinery.

District tax. Chapter 118. The board of supervisors of each county annually levy, along with the county levy, a road tax upon all taxable property in the several magisterial districts of their county of not to exceed forty cents on each one hundred dollars' worth of taxable valuation. The amount so collected is expended in the several road districts of the county.

Special tax. Chapter 308, section 2. The board of supervisors of any county in the state, which has not a special road law in force therein, may divide their respective counties into road sub-districts. When authorized by a majority vote of the qualified voters a special road tax may be levied in any such sub-district, not exceeding fifty cents on each one hundred dollars' worth of taxable property therein.

Bonds. Acts of 1908, p. 408. An amount, not exceeding an amount, the interest upon which, at the rate authorized by the supervisors, requires the imposition of an annual tax in excess of twenty cents on each one hundred dollars, may be levied when three-fifths of the qualified voters voting on the proposition cast their ballots in favor of it.¹

Statute labor. All road taxes are paid in cash, statute labor having been abolished in 1904.

¹Thirteen counties of the state have taken advantage of this law and issued bonds in amounts ranging from \$25,000 to \$200,000, and in a total sum of over \$1,000,000.

Local Supervision. Acts of 1908, p. 411-412. Some counties are operating under special laws. Generally the supervision, management and control of highways rest in the county boards of supervisors, county superintendents of roads, road sub-district boards and road sub-district surveyors of their respective counties.

The supervisors of the county prepare the plans of roads and bridges when called upon.

The board of county supervisors biennially appoint a county superintendent of roads who must either be a civil engineer or well versed in road building. He superintends the work of repairing, opening and maintaining of county roads and bridges and acts as purchasing agent for the board of supervisors. His compensation is determined by the board of supervisors.

If deemed necessary, the superintendent with the approval of the county board of supervisors may divide the county into road districts each of which usually consists of at least one magisterial district. This division into districts can be made only when the superintendent cannot personally supervise the repair of and work upon roads.

Convict Labor. Laws of 1906, chapter 74. All prisoners convicted of crime and sentenced either to hard labor on the public roads or to imprisonment in jail, and all persons imprisoned for default in the payment of fines and costs, constitute the state convict road force.

Upon application of the superintendent of the penitentiary the judges of the circuit courts of the counties of the state order persons convicted to join the state convict road force.

Chapter 59. If a person awaiting trial is unable or unwilling to furnish a bail bond with satisfactory sureties, he may instead of being committed to jail, elect to join a chain gang, or the state convict force.

WASHINGTON.

The State Highway Department. Laws of 1909, chapter 186. The state highway department consists of the state highway board which is composed of the state auditor, the state treasurer and the state highway commissioner. The two first

named receive no compensation except actual expenses while engaged in their official duties as members of said board. The highway commissioner must be an experienced civil engineer, is appointed by the governor for a term of four years, and receives an annual salary of two thousand five hundred dollars and traveling expenses, not exceeding one thousand dollars per year and office expenses not exceeding one thousand two hundred dollars annually.

Powers and duties. The commissioner reports biennially the work of his office to the legislature together with recommendations as to needed state highways and their cost. The state highway board decides what portion of the amount appropriated for any state road shall be expended within the counties through which the proposed road will run.

The state commissioner surveys state roads, maps them in outline and profile and prepares plans and specifications for their construction which must be approved by the state highway board before any road is constructed or improved. The commissioner provides superintendence of construction work on state roads.

The commissioner advertises for bids for the construction of state roads and the state highway board may reject all bids if deemed advisable.

He must compile statistics and gather information relating to road work and advise persons interested in highway improvement and on request must furnish plans and specifications for road or bridge construction or repair.

The state highway board has charge of the state aid fund and its distribution throughout the state.

State Aid. Laws of 1907, p. 298. Upon being petitioned by the owners of two-thirds of the lineal feet fronting on such public highway, that the highway described in the petition be improved, the county commissioners must and without such petition may pass a resolution to this end. This resolution, which must contain a description of the highway proposed to be constructed, is transmitted to the state highway board. The state board then investigates all the circumstances and ascertains if sound public policy demands the improvement.

Appropriation. By chapter 236, Laws of 1909, the sum of six hundred and fifty thousand dollars is appropriated out of the public highway fund for the construction and maintenance of state roads. The state aid highway fund represents the proceeds of a tax of one mill annually levied upon all property in the state subject to taxation. In 1909, five hundred and ninety-five thousand dollars was appropriated out of this fund for the construction of state aid roads.

Amount granted. State roads. State roads—those built through mountainous or sparsely settled communities—are constructed wholly at the expense of the state.

State aid roads. The cost of building state aid roads is paid by the state and the locality. Fifty per cent is paid by the state and fifty per cent by the county. Fifteen per cent of the portion paid by the county is charged to the local road district within which the highway lies and the remainder is paid out of the road and bridge fund of the county. But if the improvement was made at the instance of petitioners, then fifteen per cent of the cost is paid by the owners of the abutting land in proportion to the benefits accrued.

Maintenance. State aid highways are maintained at the expense of the county by the authorities of the district through which the roads pass. State roads are maintained by the state highway commissioner at the expense of the state.

Local Supervision. Laws of 1909, chapter 224. The county commissioners have general supervision of the highways within the county. This act provides for the permanent improvement of county roads on the petition of the owners of two-thirds of the lineal feet fronting on the road to be improved. The county engineer furnishes the plans and specifications and the work is done at the expense of the owners of the land benefited. The improvement district consists of the land lying adjacent to the road to be improved, coterminous with it and extending one-half mile on each side thereof.

County engineer Laws of 1907, chapter 160. The county surveyor is hereafter to be designated as county engineer. He must be a competent civil engineer and is elected for a term of two years at a salary based on the population of the county.

The township at its annual meeting has the power to vote money for the repair and construction of roads and bridges and the electors may at such meeting direct what amount of the tax levied for road purposes shall be assessed as a labor tax and the amount to be collected as other town taxes.

The county commissioners divide the county, not oftener than once a year, into a suitable number of road districts appointing one supervisor for each. This supervisor must under the direction of the county commissioners keep the roads and bridges of the county in repair.

Road Revenues. Taxes. Laws of 1903, chapter 119.

1. All male persons between the ages of twenty one and fifty years, unless by law exempt, are required to pay a road poll tax of two dollars annually.

2. The board of county commissioners may levy a general tax for road purposes on all taxable property in the county of not to exceed four mills on the dollar.

3. A road district tax on all taxable property in the road districts, of not to exceed ten mills on each dollar of assessed valuation may be levied and collected.

District taxes. Laws of 1909, chapter 224. When the county commissioners of any county have been authorized to create local improvement districts within their respective counties the cost of constructing permanent roads therein is levied on the lands benefited thereby.

Bonds. District bonds may be issued.

Statute labor. The electors at the annual town meeting decide what proportion of the road taxes shall be paid in cash and what in labor on the highways. (Laws 1909, chapter 160.)

Convict Labor. Laws of 1907, chapter 93. All convicts confined and not otherwise employed must be employed under the authority of the state board of control in charge of the superintendent of the penitentiary in the building of state roads in this state. The places where and the manner in which such work is done are determined by the state highway board.

Laws of 1909. Special session, chapter 11. Convicts kept at work in any of the four quarries of the state are required

to work therein so long as there is any demand for the crushed rock or other output of such quarry for building or improving roads or streets.

WEST VIRGINIA

The State Highway Department. Laws of 1909, chapter 53. The chief officer of the department of public roads is a state commissioner of public roads who is appointed by the governor for a term of four years at an annual salary of three thousand dollars and actual traveling expenses not exceeding one thousand dollars for himself and his office force in any one year.

Powers and duties. The commissioner causes to be printed bulletins containing useful information concerning the construction and maintenance of roads which he distributes throughout the state. He reports biennially to the governor and the legislature and makes recommendations as to needed legislation.

The commissioner has general supervision of all public roads constructed, improved or maintained wholly or in part by state money. He prepares rules and regulations governing the conduct of county engineers in dealing with any of the public roads of the state system and determines the methods of improvement or construction thereof. He causes plans and specifications to be prepared when requested by the county engineer and investigates and determines the most suitable methods of road construction. He causes public meetings to be held in the counties for the discussion of questions pertaining to roads and advises the county engineer of his intention to hold such meetings. He examines and passes upon plans and specifications for state aid roads upon receipt thereof from the county court. He causes tests of road materials to be made.

He may examine all accounts and records kept, as required by the general road law of the state, by all road officials, and they must open such records for such examination.

State Aid. Laws of 1909, chapter 86. When a county board passes a resolution requesting that a certain road be improved under the provisions of this act the clerk of the county court

transmits a copy of such resolution to the state commissioner of public roads.

The county court then causes a survey of the road to be improved to be made with cross sections and specifications of the work. These plans and estimates if approved by the county court are then referred to the state commissioner for approval or rejection. The commissioner approves the plans and specifications if deemed advisable and if one-third of the cost of the contemplated improvement plus one-third the cost of all other roads previously approved by him does not in any year exceed the amount set apart in the treasury of the state to the credit of such road fund and available for the use of the county according to the provisions of this act.

The county court advertises for bids for doing the work, but the contract therefor must be approved by the state commissioner.

State tax. Chapter 87 provides that the state road fund shall be created by levying a tax of one cent on every one hundred dollars valuation of property, real and personal.

Amount granted. The state pays one-third of the cost of constructing county roads.

Maintenance. Roads constructed under the provisions of this act remain thereafter county roads and are maintained out of the general county fund.

Local Supervision. Chapter 52, Laws of 1909. County engineer. The office of county road engineer is created. The county court of each county appoints him and fixes his compensation. He must be competent to establish grades and keep the roads and records as provided by law. The county surveyor may serve if qualified. He works under the direction of the state commissioner of public roads.

He has general charge of the public roads and bridges within the county and general supervision of the work of constructing and maintaining the same, giving advice and information where and when needed. He examines gravel formations and deposits of stone in the county, establishes grades and approves plans, specifications and estimates for the erection and repair of bridges and the repair and construction of roads. He

advises the county court as to road work, reports annually to the state commissioner and obeys the orders of the county court.

Road Revenues. Taxes. The county court of each county levies such taxes as may be necessary for the construction and maintenance of public roads.

District tax. A tax of one dollar may be levied on every male inhabitant of each road district between the ages of twenty-one and fifty years, unless by law exempt.

County bonds. Chapter 52. The county may improve by the use of macadam, asphalt, brick or stone or any other process of equal merit roads within its limits. This may be paid for by a special levy or by the issuing of bonds. If by bonds, a petition to this end signed by fifty legal voters who are freeholders in the county, must first be addressed to the county court. The proposition is thereupon submitted to a vote at a general, school or a special election and it must receive three-fifths of all the votes cast at such election upon that question.

Chapter 86. Cities, towns and villages may raise funds by taxation by the issuing of bonds for the purpose of improving roads.

Statute labor. By chapter 52, Laws of 1909, all road taxes must be paid as other county and state taxes.

Convict Labor. Chapter 52, section 95. The county road engineer may secure prisoners, serving sentence in jail, for general work upon the highways.

PART II.

1. (Note below)

ALABAMA.

Organization. Code 1907. All public roads, bridges and ferries are under the jurisdiction of the court of county commissioners, who may divide the county into a convenient number of road precincts, and appoint one or more apportioners for each election precinct, which apportioners appoint one overseer to each road precinct or link.

Supervisors. The court of county commissioners may appoint a supervisor of the public roads who must be a civil engineer. The supervisors of public roads are required to make surveys, maps, plats and plans of the public roads and may be required to superintend the work of overseers, contractors, employees and road hands.

Road Revenues. Statute labor. Code 1907. All able bodied men of specified ages are liable to do work, not to exceed ten days a year, on the roads, or in lieu thereof pay ten dollars.

Road districts. Counties may be divided into road districts for the purpose of ordering an election on the question of levying a special road tax therein. A majority vote carries the proposition. The tax may not exceed one-fourth of one per cent on the assessed valuation of property in the road district. The county commissioners may levy a tax of not more than twenty-five cents on each one hundred dollars of assessable property for road purposes.

Convict Labor. Code 1907. The convicts of any county or municipality may be worked upon the public roads.

ARIZONA.

Organization. R. S. 1901. Public highways are under the control of the board of county supervisors. The board divides

¹Most of the matter in this part was compiled by Mr. Iver A. Acker. The material thus gathered was condensed by the legislative librarian.

the county into road districts and appoints annually, and whenever vacancies occur, an overseer for each road district.

Road overseers have the power to let contracts for the construction and repair of roads and bridges in their districts, when the amount of such contracts does not exceed two hundred dollars.

County inspector. The board of county supervisors have the power to appoint a county road inspector, when deemed necessary, who performs such duties as the board of supervisors direct. His compensation may not exceed three dollars and fifty cents per day of actual service.

Road Revenues. The county board of supervisors may levy a road tax, not exceeding twenty-five cents on each one hundred dollars of real and personal property in the county. In all counties of the first class, having unpaid road fund warrants outstanding, the board of supervisors may levy a property tax not exceeding fifty cents on each one hundred dollars valuation of real and personal property. Fifty per cent of the money thus collected is used for the redemption of outstanding road warrants, and the balance is placed by the county treasurer in the road fund and paid out on road fund warrants issued by the board of supervisors as provided by law.

Statute labor. R. S. 1901. Every able bodied male resident, over twenty-one and under fifty years of age and not residing within the corporate limits of an incorporated town or city is required to perform two days' labor on the highways within his district, or pay two dollars in lieu thereof.

ARKANSAS.

Local Supervision. Statutes 1904. Public highways are under the general supervision of the county courts, which divide their counties into road districts and appoint one overseer for each district.

Commissioner of Highways. In each county where a road tax is levied, or where the county prisoners are worked upon the public roads, the county court may appoint a suitable person, commissioner of public roads and highways, who supervises the work on the highways, or each political township may be a

road district, and the qualified electors thereof elect a township road overseer to supervise the road work therein.

Road Revenues. Statute 1904. Taxes. The county court of any county which does not require the full constitutional limit of five mills on the dollar to be levied for all county purposes, may levy for any one year a tax of not to exceed three mills on the dollar for road purposes when authorized by a majority of the electors.

District bonds. Acts 1907. Act 247. When authorized by a majority of the owners of real property in any county or part thereof, the county court of any such county may create a road improvement district, and bonds may be issued to pay for the construction of permanent roads therein.¹

Statute Labor. Code 1904. All able bodied men of specified ages are required to work on public highways within their township, not more than five days in any one year, or, pay one dollar for every day of required labor.²

Convict Labor. Statute 1904. In case the judge of the county court is unable to make a contract with any person for the employment of county prisoners, then he may order the prisoners to be worked on the public roads.

FLORIDA.

Organization. G. S. 1906. The county commissioners are invested with the general superintendence of the public roads, and each commissioner's district is a road district.

Road commissioners. The county commissioners appoint three suitable persons in each district as commissioners of roads and bridges, who lay off the roads in their districts and in turn appoint overseers of each road subdivision.

County Superintendent. The county commissioners may appoint a county road superintendent to supervise and direct the building and maintenance of all public roads in the county.

Road Revenues. G. S. 1906. Special tax. In any county

¹Many counties are operating under special laws and therefore the provisions regarding bonds issues vary in the different counties.

²Section 7270. The county court at its October term may, in its discretion, increase the days of work for the ensuing year to a number not greater than ten.

the county commissioners may levy a special tax for road purposes; not to exceed five mills on the dollar on all real and personal property.

Improvement fund. G. S. 1906. All lands granted to the state under the act of congress of 1850, known as the "Swamp-Overflow act," must be sold and the proceeds thereof apportioned among the counties in proportion to their assessed valuations, the proceeds to be expended in the building of improved roads.

Laws of Florida, 1909, Chapter 5884. In counties not constructing paved, macadamized or hard surfaced roads, the county commissioners may levy an additional road tax not to exceed three mills on the dollar on real and personal property to be used solely for the purpose of constructing roads.

Statute labor. Laws of Florida, 1907. Every able bodied male person, not exempt by law, is liable to do work on the public roads not exceeding eight days per annum.

Convict Labor. G. S. 1906. All persons confined in the county jail under sentence may be worked on the roads of the county.

GEORGIA.

Organization: Code 1895. The public roads are under the jurisdiction of the ordinaries of the ordinary courts in their respective counties. They divide their respective counties into road districts and apportion the labor and expenses equally among them.

Road commissioners. The ordinary of the ordinary court appoints three commissioners for each road district for a term of two years, who in turn appoint road overseers. The road commissioners inspect public roads and bridges within their districts. The overseers superintend the work on the roads. Road work that cannot be done by the hands subject to road labor may be done by the county chain gang, by contract, or otherwise as the county authorities may deem best.

Alternative road system. The system known as the "Alternative road law" may be adopted by any county on the recommendation of the grand jury thereof. Under this sys-

tem the officers who have charge of county matters appoint a superintendent of public roads and necessary overseers, guards and officers.

Who subject to road duty. Section 5744. Able bodied male citizens, not exempt by law, are liable to road duty, not exceeding ten days, or a payment of fifty cents per day in lieu thereof.

The county authorities may improve and repair the public roads as follows:

1. They may work a chain gang of convicts and those who do not pay the commutation tax.

2. They may have the roads worked by contract, if the contractors are required to employ the chain gang, and those who do not pay the commutation tax, and to pay for the same.

3. They may combine all the said methods.

Road Revenues. County tax. The commissioners of roads and revenues or the ordinary may levy a tax of not more than twenty cents on each one hundred dollars of taxable property, and said tax together with the commutation tax, is known as the public road fund.

Statute labor. All able bodied male persons of specified ages are subject to work on the public highways, not exceeding fifteen days in a year, unless exempt by law. The guards and convicts of the penitentiary are required to do road work, but may be exempt by the payment of one dollar for each day required to work.

Convict Labor. A chain gang consisting of the misdemeanor convicts of the county, or convicts obtained for hire from any other county, may be worked upon the roads.

INDIANA.

Organization. Generally the control of highways vests in the county commissioners and the township trustees. The latter appoint a supervisor over each of the road districts within the township.

Road Revenues. Tax. A tax of thirty cents on each one hundred dollars valuation is levied annually by the township trustee. An additional tax of ten cents may be levied for

bridges if agreed to by the board of county commissioners. A tax of ten cents upon each one hundred dollars of assessed valuation may be levied for every ten miles of gravel or stone road, by the county auditor upon all the taxable property of the county for the repair of the same.

Bonds. Bonds of the county may be issued for road purposes not exceeding four per cent of the assessed valuation of the county.

Statute labor. The poll tax may be worked. The township trustee with the approval of the county commissioners, may levy a property road tax which may be worked out.

IOWA.

Organization. County supervisors. Code 1897. The board of county supervisors has general supervision of the roads in the county.

Township supervision. Code 1907. Road districts. Each township in every county is a road district, but the board of township trustees, on petition, may divide the township into two or more road districts. The electors thereupon elect a road superintendent for their district for a term of two years.

Under the one district plan the board of trustees direct the expenditure of the road fund, let by contract the work on the roads, or appoint not to exceed four superintendents of roads to oversee the road work. The road superintendents direct the work on the roads and report twice a year to the township clerk.

Improvement districts. A highway improvement district may be formed by the county board of supervisors on the petition of residents owning a majority of the acres of the land therein. The road work in the district is let by contract and is under the supervision of a competent engineer.

Road Revenues. Laws of 1909, chapter 97. County road fund. The county supervisors may levy a tax of not to exceed one mill on each dollar of the assessed value of all taxable property in the county. On a petition of a majority of the freeholders of any township the board of supervisors may levy

an additional mill in said township, to be expended by the board on the public roads therein.

The county board may levy an additional tax of not more than one mill for the drainage of highways.

Section 7, chapter 95. Fifty per cent of the cost of constructing roads within the permanent road districts is levied on the abutting property.

Township road fund. Code 1907. The township trustees of each township may levy a tax of not less than one mill nor more than four mills on each dollar of the township assessment.

Statute labor. In townships under the one district plan the property road tax must be paid in cash, and in the others all able bodied men, not exempt by law, are required to perform two days' labor on the public highways.

Convict Labor. Convicts may be required to work upon the public roads.

KANSAS.

Organization. G. S. 1909. County engineer. In each county of the state of more than twenty thousand inhabitants county commissioners appoint an engineer of highways who has supervision of all the highway and bridge work in the county.

In any county in the state having less than twenty thousand inhabitants, the board of county commissioners may appoint a county engineer of highways.

The engineer inspects the road work, classifies roads, collects information relative to road materials, and prepares plans and specifications. The county surveyor may be county engineer if competent.

Roads may be improved by the county commissioners and a superintendent of the work appointed by them, when sixty per cent of the abutting land owners petition to this end. Seventy-five per cent of the expense is borne by the land owners, and twenty-five per cent by the township. If the road is of general importance, the county may pay a portion of the expense.

Township organization. G. S. 1909. The township board are

commissioners of roads and highways in their townships, and all roads are under their control, subject to the authority of the county engineer.

Road Revenues. County tax. The county commissioners may levy an annual road tax of not to exceed three mills on the dollar, except on real estate in cities of over two thousand population.

Township tax. The county commissioners levy a tax of not more than one mill on the dollar on all property in each township. The township board may levy a road tax, not to exceed three mills on the dollar, to improve the roads in the township. The board may have the road work done by contract.

Good roads tax. A tax of not more than one mill on the dollar for a period of not less than five years, may be levied by the county commissioners after a majority of the voters of the county have approved of the same. This tax is expended for the construction of other than dirt roads only.

A special assessment must be made for twenty per cent of the entire cost of constructing permanent roads on all lands situated within one-half mile on each side thereof.

Bonds. County bonds may be issued in amount not to exceed said twenty per cent of the contract price, and the funds for the redemption of the same come from the assessment of said lands.

Statute labor. All male persons, not exempt by law, pay a road poll tax of three dollars, or, in lieu thereof, work two days on the public highway.

All taxes assessed for the purpose of maintaining and constructing public highways must be paid in cash.

Convict Labor. County prisoners may work out fines and costs on the public highway.

KENTUCKY.

Organization. Statutes 1894. The fiscal court of each county has general charge and supervision of the public roads and bridges therein.

The public roads are maintained either by taxation or by hands allotted to work thereon.

Road precincts. The judge of each county court divides his county into road precincts, and allots all citizens liable to work therein. For each precinct he appoints a resident overseer who has charge of the road work.

In counties wherein the roads are worked by taxation it is the duty of the overseers to assist the county supervisor, if there is one, and to look after the roads in their respective precincts.

Supervisors. The fiscal court of any county where the roads are worked by taxation may appoint a county supervisor who lets to the lowest bidder the working and keeping in repair of all roads in the county for a term of not less than one year nor more than four years. He also inspects all road work and may hire hands to do the work under his own supervision instead of letting the same on contract.

Road Revenues. Laws of 1908, chapter 26. County tax. The fiscal court has power to levy a tax for road and bridge purposes of not exceeding fifty cents per year on each one hundred dollars of assessed valuation, and also a per capita tax of not exceeding one dollar and fifty cents on each male person twenty-one years of age or more.

The fiscal court of any county may require all male citizens, not exempt by law, to work on the roads not exceeding six days in the year.

Delinquent taxpayers must work out their road taxes. Laws 1908, chapter 42.

Convict Labor. Statutes 1894. All male persons confined in county jails or work houses under sentence at hard labor may be worked on the public highways.

LOUISIANA.

Organization. Acts 1902, Acts Nos. 202, 203. Road districts. The public roads are under the jurisdiction of the police juries. The police juries divide their parishes into districts, for each of which they appoint an overseer of roads.¹

¹Police juries in Louisiana correspond to boards of county commissioners or county courts in other states.

Road Revenues. Laws of 1906. Act No. 95. For the purpose of paving and improving roads, a municipal corporation drainage district, or parish, may submit to a vote the question of levying a special tax for issuing bonds therefor.

Taxes. Such special tax may not exceed five mills on the dollar of the assessed valuation in any one year.²

Bonds. Negotiable bonds may be voted upon not to exceed one-tenth of the assessed valuation of the property within a municipal corporation, drainage district or parish.

Statute labor. Acts 1902, Act No. 203. All male persons, not exempt by law, are required to perform work upon the highways, or in lieu thereof pay one dollar for each day required to work.

MONTANA.

Organization. Revised Code 1907. Road districts. The board of county commissioners of the counties of the state have general supervision over the highways. They divide their counties into suitable road districts and appoint supervisors for the same.

The road supervisors take charge of the highways and direct the road work.

Contract work. The county commissioners may let out by contract the construction and improvement of highways and bridges when the amount of the work to be done exceeds two hundred dollars.

Road Revenues. There is levied and collected on the taxable property in each county not less than one mill, nor more than three mills, for road purposes; also a special tax of two dollars on every man over the age of twenty-one years and under fifty years. All moneys so collected constitute the general road fund

Statute labor. A special road tax of two dollars may be paid by one day's labor on the roads.

²An amendment to the state constitution will be voted upon in November, authorizing the collection of one-fourth of one mill on the assessed value of all property in the state for creating a road fund to construct and maintain public roads of the state.

MISSISSIPPI.

Organization. Code 1906. Each county is divided into five districts for the election of members of the board of supervisors. The supervisor of each district has general supervision over the public highways therein. The supervisors of each county divide the county into road links and appoint one overseer for each link to have charge of the road work.

Road commissioner. The board of supervisors of each county may employ a competent person to serve as county road and bridge commissioner.

Contract work. The board of supervisors of any county may work the public roads by contract.

Road Revenues. Road fund. In addition to the commutation tax, a property tax not exceeding three mills is levied on all taxable property within the portion of the county that is worked by contract

An additional tax upon all taxable property in the county not exceeding one mill on the dollar may be levied.¹

Bonds. For refunding any outstanding indebtedness, bonds may be issued by the board of county supervisors to an amount which, added to all its bonded indebtedness, may not exceed five per cent of the assessed valuation of the property of the county.

Macadamized roads. If petitioned, the county supervisors may authorize a road to be macadamized or otherwise permanently improved. One-third the cost of building such roads must be borne by the lands benefited, and the petition must be signed by the owners of at least three-fifths of the lands bordering on the road.

Statute labor. Code 1906. All male persons not exempt by law are required to work on the roads not exceeding ten days, or pay in lieu thereof, five dollars.

Convict Labor. Code 1906. The county board of supervisors may require convicts to work on the public roads, and may make contracts for that purpose.

¹One-half of the taxes collected within a municipality are returned to the street fund of the same.

MISSOURI.

Organization. Laws of 1909. The county court of each county not under township organization has general supervision over the public roads and it may divide the same into road districts with a road overseer for each.

County engineer. The county court appoints a county highway engineer, who may also be the county surveyor, and who inspects and supervises the highways of the county.

Township organization. Laws of 1909. In counties under township organization, the highways are under the general supervision of the county courts.

The county engineer has direct supervision over all the public roads in the county, and over the road overseers of the townships

Road Revenue. Laws of 1909, page 768. State fund. All moneys accruing to the state from any levy for road purposes constitutes the general state road fund. This fund must be used for the construction of permanent roads only.¹

State aid. For the construction of permanent roads, the state pays one-half, the citizens may pay one-fourth, and the county or district (or city) may pay the remaining fourth. The apportionment of the fund is based on the assessed valuation, but no county may receive more than three per cent in a year.

The county courts may levy a tax of not more than twenty cents on each one hundred dollars valuation as a road tax.

Special road and bridge fund. A special tax, not exceeding twenty-five cents on each one hundred dollars valuation, may be levied in counties not under township organization, for road and bridge purposes.

Township tax. The township board may levy a tax for road purposes of not to exceed twenty-five cents on the one hundred dollars valuation.

County bonds. If two-thirds of the votes cast at a special election are in favor of the proposition, bonds must be issued

¹A constitutional amendment will be submitted to the voters of the state, authorizing a state tax of five cents on the one hundred dollars assessed valuation to be levied and collected on all taxable property.

by the county court, but the aggregate indebtedness of the county after the issuing of said bonds must not exceed five per cent of the assessed value of all property in the county. Special road districts may be formed and may issue bonds.

Statute labor. The county court in all counties not under township organization may levy, upon all persons not exempt by law, poll tax of not less than three, nor more than six dollars. This tax may be worked out at the rate of fifteen cents per hour.

NEBRASKA.

Organization. Statutes, 1909. County board. The county board has general supervision over the public roads. It divides the county into road districts. The roads in these districts are under the supervision of overseers.

Federal aid. Whenever any county desires federal aid, the county commissioners appoint some person chief of highways, who makes application to the Bureau of Public Highways at Washington.

Federal inspection. Roads improved by federal aid must be inspected by a federal officer.

Improvements, how paid for. One-half the cost of such improvements shall be paid by said federal aid, at least one-fourth by the residents of the district improved, and the remainder by the county.¹

Road Revenues. County levy. For roads, the levy may not exceed five, and for bridges, four mills on the dollar.

Special tax. County commissioners may levy a special tax not exceeding five mills on the dollar to pay outstanding road warrants.

One-half of all moneys collected constitutes the county road fund, and is equally divided among the several commissioners' districts; the other half constitutes a district road fund, and is expended in the road district from which it was collected.

Road improvement levy. On the petition of interested parties, the county board may levy a tax on the property in such road

¹It is not clear how federal aid is given or obtained.

district, township or precinct, for road improvement purposes. The petition may specify the levy.

Township rate. The rate of taxes in townships for road purposes may not exceed ten mills on the dollar, for roads, and not more than two mills on the dollar for bridges.

Statute labor. Sections 6102-6103. In case of sudden emergencies, the road overseer may call out any able bodied man under fifty years of age, in his district, to work on the highways.

Poll tax. Every male inhabitant, unless exempt by law, must pay a poll tax of two dollars and fifty cents. This, and all other road taxes, must be paid in cash.

NEVADA.

Organization. All public roads are under the control of local overseers, and the board of county commissioners.

Road inspectors. The county commissioners may appoint one road inspector for each road district into which they have divided the county.

Contract. When the cost of any contemplated road work exceeds one hundred dollars, the work must be let out on contract.

Road Revenues. County fund. The commissioners may levy a tax not to exceed two and one-half mills on all taxable property of their county, for highway purposes.

When petitioned by a majority of the property holders of any district, the county commissioners may levy a tax not to exceed three dollars upon each one thousand dollars valuation therein, to be used for road purposes within the district. This tax may be worked out

Poll tax. Each male citizen, unless exempt by law, is required to pay a poll tax of three dollars for the use of the state and county.

NORTH CAROLINA.

In this state the road laws vary in the different counties. (Laws 1909.)

Organization. Code 1905. The justices of the peace in each township supervise and control the public roads, and are

styled the board of supervisors of public roads of such township. The boards of county commissioners have general supervision of roads in counties.

The township board of supervisors divides the township into road districts and appoints road overseers to superintend the road work therein.

Road Revenues. County tax. The county commissioners levy taxes for all county purposes. The taxes so levied must not exceed double the state tax, without legislative sanction. Under this limitation, the levy of taxes for road purposes is left entirely to the board of county commissioners.

Statute labor. All male persons not exempt by law are required to work on the public roads not to exceed six days in any one year.¹

Personal labor may be commuted by the payment of one dollar for each day required to serve.

Convict Labor. The county commissioners, or counties jointly, may work the county convicts on the public roads.

The state prison authorities must furnish not exceeding twenty-five state prison convicts, if requested by the county commissioners, to work on the public roads.

NORTH DAKOTA.

Organization. Code 1905. The highways are built and repaired under the direction of township road overseers, or, in counties not under township organization, the county commissioners divide each county into road districts and appoint a supervisor over each.

Road Revenues. Road and bridge fund. In each county having a population of two thousand or more, a tax of not less than one mill on each dollar of taxable valuation, except in incorporated cities and villages, may be levied for road and bridge purposes.

The road tax may not exceed five mills, nor the bridge tax two mills on the dollar.

¹A number of counties have abolished statute labor and require the payment of road taxes in cash. Most counties are under special laws passed by the general assembly.

Statute labor. This tax may be worked out at the rate of one dollar and fifty cents per day.

Township levy. A township road tax, not to exceed eight mills, and a bridge tax not to exceed two mills on each dollar of assessed valuation, may be levied by the electors at the annual township meeting. This tax may be worked out unless the township lets the building or grading of roads on contract, when this tax must be paid in cash. (Section 3210.)

Poll tax. Every male inhabitant, not exempt by law, is required to pay a road poll tax of one dollar and fifty cents. This tax may be paid by one day's labor on the road.

OKLAHOMA.

Organization. The county commissioners have general supervision of county roads. The township board has general supervision of the roads thereof, and the members are known as highway commissioners.

Road districts. The township highway commissioners divide the township into road districts and appoint supervisors to take charge of the road work.

County engineer. The board of county commissioners of each county in the state may appoint a civil engineer and resident of the county as county engineer, who serves for one year. He inspects and superintends all road work within his county.

Improvement districts. Road improvement districts consisting of not less than eighteen square miles in area may be created in any county upon a written petition signed by fifteen per cent of the qualified electors of the proposed district. Seventy-five per cent of the cost of road improvement therein is borne by the district and twenty-five per cent by the county.

Road Revenues. Compiled Laws 1909. Road and bridge tax. The township board may levy a general road and bridge tax not to exceed five mills on the dollar.

County bonds. County bonds for road purposes may be issued not in excess of two per cent of the assessed valuation of the county if three-fifths of the electors vote in favor of the proposition.

Township bonds. Upon the approval of three-fifths of the

voters of the township at an election, the township board may issue bonds not to exceed three per cent of the assessed valuation of the township, for highway improvement. To provide a sinking fund for the payment of these bonds, a special tax may be levied.

Statute labor. Laws 1910. Every male citizen, not exempt by law, is subject to four days' work upon the public highways, or, in lieu thereof, a payment of five dollars.

Convict Labor. Compiled Laws 1909. The board of prison control is authorized to provide for the working of convicts on the public roads. Convicts are maintained at the expense of the county, and are distributed equitably among the judicial districts of the state, the roads to be worked being designated by the county commissioners.

OREGON.

Organization. General Laws 1903. The public highways are under the general supervision of the county courts. The court divides the county into a convenient number of road districts and appoints a road supervisor over each district to have charge of the road work.

County road masters. The county court may appoint a road master or masters, who must devote his whole time to the matter of roads and bridges. The road work is done by contract or hired labor.

Road Revenues. Laws 1909. County road fund. The county court or commissioners' court may levy a tax for road purposes of not to exceed ten mills on the dollar.

Fifty per cent of the money so collected is equitably apportioned among the several road districts. This tax must be paid in cash.

Special levy. The taxpayers of any road district may vote for an additional levy for road purposes, at a meeting held for that purpose by at least ten per cent of said taxpayers.

Poll tax. General laws 1903, page 275. Every male inhabitant between the ages of twenty-one and fifty years must annually pay a cash road poll tax of three dollars.

SOUTH CAROLINA.

Organization. Code 1902. The supervision and control of roads varies in the several counties of the state. In most counties the supervision is vested in the board of county commissioners and the county supervisors, while in others the township board of commissioners has concurrent jurisdiction.

The township board in the last mentioned counties, with the approval of the county commissioners or the supervisors of the county, divides the townships into a suitable number of road districts, and appoints an overseer for each district.

In the first mentioned counties the county commissioners divide the highway into suitable sections, and appoint one overseer for each section.

Contract work. Certain counties have been authorized by the general assembly to adopt the contract system of working the roads. (Laws 1909, No. 100.)

Road superintendents. These counties are authorized by law to employ superintendents and engineers to lay out and plan the road work.¹

Road Revenues. Taxes. The county or township boards of commissioners may levy a road tax not to exceed one mill on the dollar unless an additional levy is authorized by law.

Special tax. Laws 1904, No. 216. When the electors of a township vote for a special road tax, the township board may levy the same, but not to exceed two mills on the assessed valuation of the township.

Statute labor. Laws 1904. All male persons not exempt by law, are required to perform labor on the public highways for such number of days, not less than two nor more than eight, as may be fixed by the county commissioners.² This tax may be commuted by a cash payment at a rate fixed by the county commissioners, but not less than one nor more than three dollars per day may be required.

Convict Labor. Code 1902. The county supervisors may employ county chain gangs on the public highways.

¹Code 1902, section 1381. Any county may adopt the contract system. But most counties operating under this system are under special laws.

²Laws 1909, No. 100. The age limits vary in the several counties. In some, all taxes including the labor tax, must be paid in cash.

SOUTH DAKOTA.

Organization. Code 1903. The county commissioners have general supervision of the highways.

In counties under township organization, the township supervisors have supervision of the roads within their respective townships. (Laws 1907, chapter 162.)

In counties not under township organization, the commissioners divide the county into a suitable number of road districts and appoint a road supervisor for each district.

Road Revenues. County tax. The board of county commissioners may levy a tax for county roads not to exceed two mills on the dollar.

Township tax. The township board may levy a road tax of not to exceed fifty cents on each one hundred dollars valuation. But no tax for highway labor and road purposes may exceed the amount voted to be raised at the annual town meeting.

Statute labor. Road taxes may be paid by labor unless the township has adopted the cash system. The road work in any township which has adopted the cash system is let out on contract. (Laws 1909, chapter 162.)

Poll tax. Every male person between the ages of twenty-one and fifty years, unless exempt by law, is subject to a poll tax of one dollar and fifty cents which must be paid in money or by one day's labor on the public roads.

TENNESSEE.

Organization. Acts 1909, chapter 561. State Highway Commission. A state commission on public roads is created, consisting of three members appointed by the governor, one from each grand division of the state, for a term of three years and without compensation.

The commission investigates the work of the United States government in the matter of public roads and reports at each session of the General Assembly, giving the results of its investigations, together with such recommendations as may seem proper.

Local organization and supervision of highways vary in the

different counties. In general, the county court elects a road commissioner of the county, who has general supervision over the public highways.

Contract. All highways in the state are worked by contract. The contractor has the benefit of the road hands assigned to his section, and is entitled to the commutation money of such as choose to commute.

Road Revenues. Acts 1899, chapter 368. County tax. The county court may levy a tax for road purposes, of not less than five, nor more than forty cents on the hundred dollars valuation.

One-half the labor and one-half the money paid in commutation of labor, and one-half the road fund raised by taxation, belonging to any road district, must be used for the construction of permanent roads. (Laws 1903, chapter 242.)

Statute labor. All male residents, not exempt by law, are required to work on the roads not less than four nor more than eight days in any one year, as may be fixed by the county court, or, in lieu thereof, pay seventy-five cents per day.

Convict Labor. Acts 1899, chapter 358. Prisoners confined in the county jails may be worked under contract on the public roads.

TEXAS.

Organization. Code 1899. The county commissioners have general supervision over the highways. Each commissioner is supervisor of roads within his precinct.

The commissioners' court divides the county into precincts and appoints overseers to supervise the road work therein.

Road Revenues. Code 1899. Taxes. The county commissioners may levy and collect taxes for all purposes.

County bonds. General laws 1903, chapter 4. The county commissioners may issue bonds for road and bridge purposes, provided a majority of the voters of the county favor such issue.

Statute labor. Statutes, 1899. All male persons, not exempt by law, are required to work on the public highways not

exceeding five days each year, or in lieu thereof pay one dollar per day.

Convict Labor. County convicts must be put to work upon the public highways if they cannot be utilized in the work house or on the county farm.

UTAH.

Organization. State Aid. Compiled Laws 1903. Sec. 1143X. When the county commissioners decide to improve a portion of the state highway system permanently, they notify the state engineer, who prepares plans and specifications and estimates of the cost. He also passes on the contract before it is let, and if he approves of the whole the state becomes liable for one-half of the cost of the work.

The county commissioners have general supervision over the public highways. They divide their respective counties into a suitable number of road districts and appoint, biennially, supervisors therefor. They may also appoint a county road commissioner biennially. He takes charge of the public roads and prepares plans and specifications of road improvements. Laws 1909, chapter 118.)

Road Revenues. Code 1907. No tax is levied specifically for road purposes, but the county commissioners may appropriate such sums therefor as they deem necessary.

County bonds. The county commissioners may issue bonds for road purposes when a majority of the legal voters, paying a property tax, favor such issue.

Special districts. Laws 1909, chapter 180. County commissioners may divide their counties into special tax districts for the purpose of constructing permanent roads and may levy a special road tax therein.

The property so taxable is divided into three equal sections. The first section lies adjacent to the said road and bears fifty per cent of the cost thereof. The middle section bears thirty per cent, and the section most remote from the road bears twenty per cent of the special tax.¹

¹The sections herein referred to embrace corresponding divisions on both sides of the road, and one-half the distance each way to a parallel county road.

Statute labor. Poll tax. An annual road poll tax of two dollars is levied upon persons not exempt by law, and must be paid in cash. (Laws 1907, chapter 118.)

Code 1907. Any county road designated by the county commissioners and approved as such by the state engineer, may become a part of the state system of highways.

The state legislature makes special appropriations for road purposes.

Manual on Road Building. The state enginner prepares a manual on road building for free distribution among the several county supervisors for the promotion of uniformity in road building.

WISCONSIN.

Organization. County commissioner of highways. The county board elects a county road commissioner, who must be a competent engineer or road builder. He has general supervision of all county roads.

Town superintendent. The board appoints a town superintendent of roads, who has general supervision of the highways therein.

Statute labor. Poll tax. Every able bodied man, not exempt by law, is required to pay a road poll tax of one dollar and fifty cents. This tax may be worked out.

Road Revenues. Laws 1909. Town tax. A highway tax of not less than one nor more than seven mills on the dollar is assessed annually in each town or superintendent's district. An additional levy of not to exceed fifteen mills on the dollar may be levied if the same has been authorized by a vote of the town meeting.¹

Town bonds. The town board may issue bonds, not exceeding five thousand dollars in the aggregate, for road building.

County tax. The counties may levy a tax of not to exceed two mills for the purpose of building county roads.

County bonds. County bonds may be issued for road pur-

¹These taxes may be worked out unless the town board has adopted the cash system.

poses not to exceed, at one time, one per cent of the total assessed valuation.

Special tax. The electors of any town at the annual meeting may vote a special highway tax of not less than one-half or more than one mill on the dollar of the assessed valuation. This tax must be collected in money and used only for the construction and improvement of permanent highways.

County aid. In the construction of such permanent roads, the towns are aided by the county to the extent of one-half the cost. The county tax for this purpose may not exceed three-fourths of one mill on the dollar of assessed valuation.

WYOMING.

Organization. Compiled statutes 1910. All county roads are under the supervision of the county commissioners.

Road Districts. Supervisors. The county commissioners may divide the county into as many road districts as they may deem practicable, and a supervisor is elected for each district.

In case the county is not divided into road districts, a county supervisor of roads is elected by the voters of the county.

Road Revenues. For county revenue or all purposes there is levied annually a tax of not to exceed twelve mills on the dollar. From the general fund so collected the county commissioners appropriate money for road purposes.

Statute labor. Poll tax. The county commissioners may annually levy upon each able bodied man, not exempt by law, a special poll or road tax of two dollars. This tax may be paid by one day's labor on the highways.

Convict Labor. County convicts may be put to work upon the highways and streets.

APPENDIX I.

The State Highway Department.

How constituted. The state department consists of one salaried commissioner or engineer appointed by the governor or elected by the people for a definite term in Connecticut; Delaware, Maine, Michigan,¹ New Hampshire,² New Jersey, Ohio, Pennsylvania Vermont and West Virginia.

It consists of salaried commissioners three in number, except in Maryland where they are five, in Colorado, Maryland, Massachusetts and New York.³

It consists of unsalaried commissioners appointed by the governor for a given term and having only general supervision of the work, which is done by a secretary who is a civil engineer, or an engineer, in Illinois, Minnesota, Rhode Island and Tennessee.

It consists of an ex-officio board, sometimes, but not always, comprising the heads of engineering schools or departments of a non-political nature, in California, Idaho, New Mexico, Virginia and Washington.⁴

Powers and Duties.

The state highway department must prepare or approve the plans and specifications of highways to be improved at the expense or by the aid of the state, and supervise the work of construction in all states granting state aid.

It passes upon contracts for highway improvement by the aid of state funds before the same are finally let or itself lets the same, in California, Colorado, Connecticut, Maine, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey,

¹Elected by the people.

²Appointed by the governor and council.

³The special legislative committee on highways for Wisconsin recommends this type of commission. Report 1910, p. 13.

⁴The Model Bill prepared by the department of Public Roads, Washington, D. C., recommends this form of commission as most likely to remain free from political influences.

New York, Ohio, Pennsylvania, Rhode Island, Vermont and Washington.

It selects or approves the selection made by the local authorities of roads to be permanently improved wholly by state funds or by state aid in California, Colorado, Connecticut, Maine, Maryland, Massachusetts, Michigan, New Jersey, New York,¹ Ohio, Pennsylvania, Rhode Island,² Vermont and Washington.

Members.

Qualifications—

1. Qualified electors in Rhode Island.
2. One commissioner must be a civil engineer in New York. Non-partisan.

No more than two members of the commission may belong to the same political party in Illinois, Minnesota and New York.

No qualifications prescribed in California, (ex officio) Colorado, Idaho, Illinois, Maryland, Massachusetts, Minnesota and New Mexico.

¹Both state and county highways are selected by the state commission.
²Selection must be approved by the general assembly before the work of improvement is completed.

STATE	Total State Appropriation	Annual State Appropriation	State Tax Levy	Per cent Paid by State	Per cent paid by County	Per cent paid by township or road dist.	Number of Commissioners	Salary Per Year
1. California	.....	.....	R1	100 R	.....	.....	4	Ex-Oficio
2. Colorado	.....	\$50,000	.....	75 to 87½	.....	.....	3	\$900, Ch. 1,200
3. Connecticut	.....	750,000	.....	50	50	12½ to 25	1	\$5,000
4. Delaware	.....	.....	.....	.....	.....	.....	1R	1,000
5. Idaho	.....	.....	.....	R	.....	.....	3	Ex-Oficio
6. Illinois	.....	25,000	.....	R	.....	.....	3	Expenses
7. Maine	.....	.....	½ mill	R	50	.....	1	2,500
8. Maryland	.....	.....	.....	50	.....	.....	6	2mb's, 2,000, ch. 2,500
9. Massachusetts	R	500,000	.....	100R	.....	.....	3	2,500, ch. 3,500
10. Michigan	\$3,500,000	150,000	.....	R	66 2-3	.....	1	2,500
11. Minnesota	.....	300,000R	1-20mill	33%	.....	.....	3	Expenses
12. New Hampshire	Bonds in sum of 1,000,000	125,000	.....	R	.....	.....	Governor & Council	.....
13. New Mexico	.....	.....	1 mill	R	.....	.....	3	Expenses
14. New Jersey	.....	300,000	.....	33%	56 2-3	10	1	5,000
15. New York	Bonds 50,000,000	3,500,000—1909	.....	100	R	.....	3	5,000, ch. 6,000
16. Ohio	.....	158,000	.....	50	25	25	1	2,500
17. Pennsylvania	6,356,232.47	1,500,000	.....	75	12%	12%	1	6,500
18. Rhode Island	Bonds 600,000	.....	.....	100	.....	.....	5	Expenses
19. Vermont	100,000R	75,000	5 cents	50	.....	50	1	1,800
20. Virginia	.....	250,000	.....	50	.....	R	4	3,000
21. Washington	.....	650,000	1 mill	100-50R	50R	15R	3	Expenses
22. West Virginia	.....	.....	1-10mill	33%	66 2-3	.....	1	3,000

1. See Remarks.

STATE	Salary of state engineer	Payment of property Road Taxes	Assessed valuation of state	REMARKS
1. California.....	\$4,800	Money	2,337,279,720.	Proposition to bond state for \$18,000,000 for road purposes will be voted upon at the election of 1910.
2. Colorado.....	2,500	Money	4,671,640	Each county must raise double the amount apportioned to it by the commission.
3. Connecticut.....	.....	Money	922,071,592R	Exclusive of the property of public utility corporations.
4. Delaware.....	.....	Money or labor	120,835,384	He is "State highway commissioner for New Castle county."
5. Idaho.....	.....	Money in 1/2 the twps.	1,263,500,487	The state furnishes crushed rock and road machinery to the localities.
6. Illinois.....	1,800	Money	364,898,714	Reward system. Depends on valuation and amounts locally appropriated.
7. Maine.....	.....	Money	765,109,228	Bonds in the sum of \$5,000,000 have been issued for road purposes.
8. Maryland.....	.....	Money	4,574,136,145	One-fourth of the amount expended must be returned by the county in installments.
9. Massachusetts.....	.....	Money	1,648,671,411	Reward system. Amount depends on kind of road built.
10. Michigan.....	.....	Money	1,090,684,936	This law was declared unconstitutional.
11. Minnesota.....	1,800	Money in 1/2 the twps.	249,219,335	Reward system. Amount depends on valuation and local appropriation.
12. New Hampshire.....	6,500	Money	63,724,838	May pay entire cost or only a part thereof.
13. New Mexico.....	.....	Money or labor	9,686,118,681	Ten per cent is paid by the abutter
14. New Jersey.....	.....	Money	2,352,680,824	When taxes are collected in cash the state awards the townships a sum equal to fifty per cent of the amount so collected.
15. New York.....	.....	Money	5,769,777,327	Regular annual appropriation.
16. Ohio.....	.....	Money in some twps	497,547,560	The county may determine what portion of the county's share shall be paid by the smaller road divisions.
17. Pennsylvania.....	.....	Money	185,826,798	The state pays the entire cost of state roads and fifty per cent of the state aid roads. Fifteen per cent is charged to the local road district and fifteen per cent to the petitioners owning abutting property.
18. Rhode Island.....	.....	Money	579,565,539	
19. Vermont.....	.....	Money	790,419,826	
20. Virginia.....	3,000	Money	1,068,000,000	
21. Washington.....	2,500	Town meeting decides		
22. West Virginia.....	.....	Money		

APPENDIX II.

LOCAL BONDS.

The following states not granting state aid in highway construction, have given the counties, townships or road districts power to issue bonds for the permanent improvement of wagon roads: Arkansas, Indiana, Kansas, Louisiana, Mississippi, Missouri, Oklahoma, Texas, Utah and Wisconsin.

Of the states improving highways wholly or partly at state expense, the following have given the localities power to issue bonds for the construction of roads: California, Colorado, Connecticut, Idaho, Illinois, Michigan, Minnesota, New Jersey, New York, Ohio, Pennsylvania, Vermont, Virginia, Washington and West Virginia.

APPENDIX III.

COST OF BUILDING ROADS.

The following table has been inserted because of the insistent demand for some figures relating to the actual cost of building roads of different materials. The practical difficulties in the way of obtaining statistics that mean anything, are so clearly apparent as not to need an extended enumeration. Everything depends upon local conditions and the cost therefore varies in different localities of the same state. The excavation per mile, the location of the material and the freight thereon, the prevailing rate of wages, the width of the road, the difficulties of drainage, the thickness of the metal and the methods used in putting it on, are some of the elements entering into the items of cost that vary in every locality. Moreover, statistics have not been kept and published except in a few states, and in these the method of reporting is quite incomplete and unsatisfactory to the student at a distance. Some of the figures given below have been obtained from published reports of state highway departments, while others have been secured by correspondent with engineers or state highway authorities.

	Material	Width	Miles Improved	COST PER MILE		
				Maximum	Minimum	Average
1 Alabama	Gravel .....	.....	2,400	\$ 8,000	\$ 800	.....
	Sand clay .....	.....	.....	2,000	600	.....
	Macadam limestone .....	.....	.....	6,000	1,500	\$ 4,000
2 Illinois	Gravel	14	8,000	2,860	.....	1,200
	Macadam	14	.....	.....	.....	6,500
	Earth .....	.....	85,000	.....	.....	.....
	Limestone .....	.....	.....	.....	.....	**6,934
	Brick	6	.....	.....	.....	*8,000
	Stone	185	.....	.....	.....	*4,000
	Oiled earth	2	.....	.....	.....	*2,000
Iowa	Gravel .....	.....	.....	.....	600	.....
	Stone .....	.....	.....	.....	.....	7,000
Kansas	Stone .....	.....	400	.....	.....	4,000
	Sand clay .....	.....	100	800	350	.....
Kentucky	Gravel .....	.....	.....	.....	.....	1,635
	Limestone .....	.....	.....	.....	.....	2,136
Maine	Gravel .....	.....	109	.....	.....	2,675
	Earth .....	.....	.....	.....	.....	2,152
	Macadam .....	.....	17	.....	.....	7,969
Michigan	Gravel	9	250	.....	.....	1,678
	Stone	9	.....	.....	.....	3,749
	Concrete	18	5	.....	.....	13,400
	Clay gravel .....	.....	.....	.....	.....	.....
Minnesota	Gravel .....	.....	1,600	800	600	.....
Missouri	Rock .....	.....	800	1,500	500	.....
	Gravel .....	.....	4,200	.....	.....	4,300
New Hampshire	Gravel .....	.....	236	.....	.....	2,000
	Earth .....	.....	.....	.....	.....	3,300
	Granite	67	.....	.....	.....	1,000
New Jersey	Gravel	636	.....	.....	.....	5,800
	Macadam	2,222	.....	.....	.....	4,250
New York	Gravel bottom .....	.....	.....	.....	.....	10,000
	Earth	3	.....	.....	.....	6,069
						3,892

	Material	Width	Miles Improved	COST PER MILE		
				Maximum	Minimum	Average
3. North Carolina	Local stone .....	.....	.....	.....	.....	8,585
	Limestone bottom .....	.....	.....	.....	.....	9,726
	Field stone .....	.....	.....	.....	.....	8,428
	All roads improved .....	.....	.....	.....	.....	8,500
	Gravel .....	.....	629	1,200	500	.....
	Macadam .....	.....	881	7,000	3,000	.....
	Sand clay .....	.....	564	1,800	500	.....
4. Ohio	Macadam	13	42.5	.....	.....	.....
	Brick	13.5	20.5	.....	.....	7,395
	Macadam .....	.....	130	6,000	2,500	10,794
5. Oregon	Stone .....	.....	700.6	.....	.....	.....
6. Pennsylvania	Gravel .....	.....	3,079	.....	.....	11,668
7. South Carolina	Stone .....	.....	135	.....	.....	800
	Sand clay .....	.....	4,556	.....	.....	2,250
8. Virginia	Gravel .....	.....	69.6	.....	.....	800
	Sand clay .....	.....	64.3	.....	.....	1,352
	Stone .....	.....	149	.....	.....	827
19. Washington	Gravel .....	.....	6.8	.....	.....	5,203
	Earth .....	.....	197.2	.....	.....	6,000
	Macadam .....	.....	7.16	.....	.....	4,000
20. Wisconsin	Gravel .....	.....	.....	2,000	400	12,000
	Granite stone .....	.....	.....	6,000	1,700	.....

*Approximate.

**Object lesson road.

APPENDIX IV.

STATE AID OR TOTAL STATE EXPENDITURE FOR
HIGHWAY PURPOSES BY YEARS SINCE
POLICY WAS ADOPTED.

ILLINOIS			NEW JERSEY—Continued.		
Year		Amount	Year		Amount
1905	.....	\$ 25,000.00	1895	.....	100,000.00
1906	.....	25,000.00	1896	.....	100,000.00
1907	.....	50,000.00	1897	.....	100,000.00
1908	.....	50,000.00	1898	.....	100,000.00
1909	.....	65,000.00	1899	.....	150,000.00
1910	.....	65,000.00	1900	.....	150,000.00
MAINE			1901	.....	150,000.00
1902	.....	15,000.00	1902	.....	250,000.00
1903	.....	40,000.00	1903	.....	250,000.00
1904	.....	40,000.00	1904	.....	250,000.00
1905	.....	40,000.00	1905	.....	285,000.00
1906	.....	50,000.00	1906	.....	400,000.00
1907	.....	70,000.00	1907	.....	250,000.00
1908	.....	131,577.00	1908	.....	300,000.00
1909	.....	142,757.00	1909	.....	300,000.00
1910	.....	321,159.00	NEW YORK		
MICHIGAN			1898-1909	.....	11,000,000.00
1906	.....	20,000.00	OHIO		
1907	.....	50,000.00	1905	.....	10,000.00
1908	.....	100,000.00	1906-1907	.....	300,000.00
1909	.....	150,000.00	1908	.....	440,000.00
1910	.....	140,000.00	1909	.....	486,577.75
MINNESOTA.			1910	.....	586,654.00
1907	.....	54,000.00	PENNSYLVANIA.		
1908	.....	56,000.00	1903-1904	.....	500,000.00
1909	.....	75,000.00	1904-1905	.....	500,000.00
NEW HAMPSHIRE.			1905-1906	.....	1,250,000.00
1905	.....	125,000.00	1906-1907	.....	1,250,000.00
1906	.....	125,000.00	1907-1908	.....	2,000,000.00
1907	.....	125,000.00	1908-1909	.....	2,000,000.00
1908	.....	125,000.00	1909-1910	.....	1,000,000.00
1909	.....	375,000.00	1910-1911	.....	1,000,000.00
NEW JERSEY			VIRGINIA		
1892	.....	20,661.85	1907	.....	66,000.00
1893	.....	71,237.22	1908	.....	99,800.00
1894	.....	74,696.03	1909	.....	329,800.00
			1910	.....	*234,800.00

*Plus auto tax.

APPENDIX IV.

STATE AID OR TOTAL STATE EXPENDITURE FOR
HIGHWAY PURPOSES BY YEARS SINCE
POLICY WAS ADOPTED.

ILLINOIS		NEW JERSEY—Continued.	
Year	Amount	Year	Amount
1905	\$ 25,000.00	1895	100,000.00
1906	25,000.00	1896	100,000.00
1907	50,000.00	1897	100,000.00
1908	50,000.00	1898	100,000.00
1909	65,000.00	1899	150,000.00
1910	65,000.00	1900	150,000.00
		1901	150,000.00
MAINE		1902	250,000.00
1902	15,000.00	1903	250,000.00
1903	40,000.00	1904	250,000.00
1904	40,000.00	1905	285,000.00
1905	40,000.00	1906	400,000.00
1906	50,000.00	1907	250,000.00
1907	70,000.00	1908	300,000.00
1908	131,577.00	1909	300,000.00
1909	142,757.00		
1910	321,159.00	NEW YORK	
		1898-1909	11,000,000.00
MICHIGAN			
1906	20,000.00	OHIO	
1907	50,000.00	1905	10,000.00
1908	100,000.00	1906-1907	300,000.00
1909	150,000.00	1908	440,000.00
1910	140,000.00	1909	486,577.75
		1910	586,654.00
MINNESOTA.		PENNSYLVANIA.	
1907	54,000.00	1903-1904	500,000.00
1908	56,000.00	1904-1905	500,000.00
1909	75,000.00	1905-1906	1,250,000.00
		1906-1907	1,250,000.00
NEW HAMPSHIRE.		1907-1908	2,000,000.00
1905	125,000.00	1908-1909	2,000,000.00
1906	125,000.00	1909-1910	1,000,000.00
1907	125,000.00	1910-1911	1,000,000.00
1908	125,000.00		
1909	375,000.00	VIRGINIA	
		1907	66,000.00
NEW JERSEY		1908	99,800.00
1892	20,661.85	1909	329,800.00
1893	71,237.22	1910	*234,800.00
1894	74,696.03		
		*Plus auto tax.	

